Application for Air Operation Permit
Orange County Solid Waste
Management Facility

Public Utilities Division

Orange County, Florida

CH2M/G&R - THE JOINT VENTURE

Project No. 94520.14A

June 14, 1996

APPLICATION FOR AIR OPERATION PERMIT
ORANGE COUNTY SOLID WASTE
MANAGEMENT FACILITY

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New ELSA Application Recieved 29-Sep-1997

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : ORANGE COUNTY UTILITIES DIVISION
2. Site Name : ORANGE COUNTY SOLID WASTE FACILITY
3. Facility Identification Number : * [X] Unknown
4. Facility Location : Orange County Solid Waste Management Facility, located on Young Pine Road in southeast Orange County, serves the solid waste needs of the unincorporated areas of the County, and a majority of the incorporated municipalities (all incorporated areas except the cities of Maitland, Winter Park, and a portion of Apopka). The existing Facility covers approximately 1,500 acres and borders the Orange County Eastern Regional Wastewater Treatment Facility to the north, the Orlando Utilities Commission (OUC) Stanton Power Plant to the east, State Road 528 to the south, and private properties to the west. In anticipation of future solid waste needs of the community, the County has acquired approximately 3,500 acres of adjoining properties for future expansion and further development of the existing 1,500 acre Solid Waste Management Facility. Exhibit A-2 shows a depiction of the location of the Facility . The existing activities and operations conducted on the grounds of the Facility can be organized into five functional areas: 1 - LANDFILL OPERATIONS: The Facility currently operates: a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8); a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; an household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities.

2 - CLOSED LANDFILL MAINTENANCE: The closed landfills areas consist of: (a) 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents; and (b) The pre-1985 closed fill areas which covers approximately 340-acres. The pre-1985 closed areas of the Landfill were generally filled using the trench method of disposal, and are comparatively lower than the other disposal areas of the site. This has allowed the County to develop Class III landfills in these areas.

3 - LEACHATE MANAGEMENT OPERATION: Includes a leachate treatment wetland system for the closed cells; and a leachate collection system, pump station, and 450,000 gallon leachate holding tank for the active cells. Leachate is pumped from the leachate holding tank to the nearby wastewater treatment facility.

4 - VEHICLE AND LANDFILL EQUIPMENT MAINTENANCE OPERATIONS: Includes a central vehicle maintenance shop building, several additional maintenance structures for different vehicle types, and an underground/above ground fuel storage and dispensing facility.

5 - MISCELLANEOUS ACTIVITIES: Other activities at this Facility include operation of a: citizen drop-off center, scale house, borrow pit, tire shredding facility, materials recovery facility, household hazardous waste transfer station, waste oil collection center, and automotive battery collection center.

The County is in the preliminary design stage to convert the existing passive landfill gas vents in Cell A-K into an active landfill gas collection and flare system.This project may also include connecting landfill gas vents from the A-K closed landfill to the current Class I Cell 7B and future Cell 8. The County is also evaluating the feasibility of utilization of the collected gases as an energy source. The County will prepare and submit a construction permit application separately, if required, for this project once the design is completed.

Street Address or Other Locator : 12100 YOUNG PINE ROAD
City ORLANDO County : ORANGE Zip Code : 32872-0067

5. Relocatable Facility?
[ ] Yes [X] No

6. Existing Permitted Facility?
[ ] Yes [ ] No

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Mr. Michael L. Chandler
Title : Manager, Solid Waste Dept.

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Orange County Solid Waste Dept.
Street Address : 5901 Young Pine Road
City : Orlando
State : FL Zip Code : 32872-0067

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone :(407)836-6600 Fax : (407)836-6629

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V sour*

_____ _____
Signature Date

* Attach letter of authorization if not currently on file.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Ms. Karen Allen, P.E.
Title : Manager, Utilities Engineering

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Orange County Utilities Division
Street Address : 109 East Church Street
City : Orlando
State : FL Zip Code : 32801-3318

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (407)836-7000 Fax : (407)836-5379

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Karen A Allen — Signature

6/14/96 — Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
No ID *	1,500 acre Solid Waste Management Facility +	

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to o

[X] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[ ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Category IV : All Non-Federally Enforceable Air Operation

This Application for Air Permit is submitted to o

[ ] Initial air operation permit for one or more existing, but previously unpermitted, emissions units.

[ ] Initial air operation permit for one or more newly constructed or modified

Current construction permit number :

[ ] Air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit renewal.

Operation permit to be renewed :

Application Processing Fee

Check one :

[ ] Attached - Amount : $0.00 [X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations : Orange County Public Utilities Title 5
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Mr. Mehran S. Beladi, P.E. Registration Number : FL 41819
2. Professional Engineer Mailing Address : Organization/Firm : CH2M/G&R JOINT VENTURE Street Address : 800 South Orlando Avenue City : Maitland State : FL Zip Code : 32751-5627
3. Professional Engineer Telephone Numbers : Telephone : (407)647-6623 Fax : (407)539-0575

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

_____ _____

Signature Date

(seal)

Professional Engineer Certification

1. Professional Engineer Name : Mr. Mehran S. Beladi, P.E.

   Registration Number : FL 41819

2. Professional Engineer Mailing Address :

   Organization/Firm : CH2M/G&R JOINT VENTURE
   Street Address : 800 South Orlando Ave.
   City : Maitland
   State : FL Zip Code : 32751-5627

3. Professional Engineer Telephone Numbers :

   Telephone : (407)647-6623 Fax : (407)539-0575

4. Professional Engineer Statement :

   I, the undersigned, hereby certified, except as particularly noted herein, that :*
   (1) To the best of my knowledge, there is reasonable assurance (a) that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions in the Florida Statues and rules of the Department of Environmental Protection; or (b) for any application for a TitleV source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in the application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;
   (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application; and
   (3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

   Signature _____ Date June 14 96

   MEHRAN S. BELADI
   NO. 41819
   STATE OF FLORIDA
   REGISTERED ENGINEER

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Mr. Mehran S. Beladi, P.E.
Title : Project Manager

2. Application Contact Mailing Address :

Organization/Firm : CH2M/G&R JOINT VENTURE
Street Address : 800 South Orlando Avenue
City : Maitland
State : FL Zip Code : 32751-5627

3. Application Contact Telephone Numbers :

Telephone : (407)647-6623 Fax : (407)539-0575

Application Comment

This application is prepared and submitted to satisfy the requirements of chapter 62-213 F.A.C. for permitting major sources of air pollution in accordance wit Title V operation permit application. The requirements of FDEP for preparation of an Emissions Inventory from a solid waste management facility as a Title V source as defined in Rule 62-213.200 F.A.C. has been followed in preparation of this Operation Permit Application.

This Application covers the estimated emissions from closed Class I disposal areas where landfill gas vents have been installed, the estimated emissions from open Class I disposal areas, and the estimated fugitive emissions from other operations and activities on the grounds of this Facility. A landfill gas estimation modeling was conducted to determine the amount of gas being generated as a result of these landfill activities. Landfill gas samples were also analyzed by a qualified laboratory to determine the composition of the emitted gases. The results of the landfill gas quantity and quality is included in exhibit D of this Application.

In instances where data were available, the actual field data is used to determine the specific amounts of annual emissions. This includes utilization of the results of laboratory analysis of the existing gases emitting from the LFG vents. In instances where actual field data is not available, USEPA default values are used. This includes calculating emissions such as that associated with unpaved roads.

The Orange County Utilities Department is in the process of development of plans for construction of improvements to the existing passive landfill gas system whereas the system will be converted to an active LFG management system complete with collection piping, a blower and flare station and condensate disposal. The County will submit separately, at a later date, an Application for Air Construction Permit to FDEP.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 481.20 North (km) : 3150.30			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 28 52 Longitude (DD/MM/SS) : 81 11 30			
3. Governmental Facility Code : 2	4. Facility Status Code : C	5. Facility Major Group SIC Code : 99 +	6. Facility SIC(s) :

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

7. Facility Comment :

The Orange County Solid Waste Facility is operated by the Orange County Utilities Division . The Facility began operation in 1971 and currently covers approximately 1,500 acres. The County has purchased approximately 3,500 acres of adjoining properties for future expansion of the landfill. No solid waste landfill activities are conducted on the acquired property at this time. Although this new property is contiguous with the original landfill, all permits on file with regulatory agencies cover the original 1,500 acre site. Therefore, the purchased property is excluded from this permit application.

Existing landfill activities are as follows:

1 - ACTIVE CLASS I LANDFILL: The County currently operates Cell 7B as a Class I disposal area. This cell covers approximately 58-acres (+/-) and was first put into operation in 1990. The original design capacity of Cell 7B was permitted to be approximately 5,300,000 cubic yards. In 1994, the side slopes of this cell were partially closed by installing final cover and landfill gas vents, thus converting the cell to a Controlled Landfill. Cell 8, immediately to the south of Cell 7B, has been permitted and constructed as the next active Class I disposal area. This cell covers approximately 47.7 acres (+/-) and is estimated to have 6,600,000 cubic yards of capacity. The County is planning to start operation of Cell 8 in August 1996. At which time the remaining side slopes of Cell 7B will be requested for the second phase of partial Closure.

2 - CLOSED CLASS I LANDFILLS: Cell A-K, which covers approximately 134 acres (+/-), was permitted and closed by the County in 1994. As part of the closure construction, the County installed a 40-mil HDPE final cap covered with 24 inches of soil, and 123 landfill gas vents, thereby converting this Closed Cell to a Controlled Landfill. These vents release methane and Non-methane gases generated as a result of waste decomposition from the disposal cell. The County is planning to collect and dispose of these gases by thermal combustion. Additionally, the Facility has other Class I disposal areas which were closed prior to the 1985 FDEP Closure Rules and are not considered Controlled Landfills. A portion of these pre-1985 closed Class I cells is permitted by FDEP for vertical expansion as a Class III disposal area. Any gas generated as a result of the decomposition process of the remaining underlying Class I material is released through horizontal vents being constructed as part of the FDEP Class III Landfill Operations Permit.

3 - YARD WASTE COMPOSTING: The County has a permitted yard waste composting operation at this Facility. The operation covers approximately 39.6 acres (+/-). Yard waste and other vegetative matter delivered to the Facility are mulched and put in windrows for production of compost. The windrows are turned periodically for approximately 60 to 90 days until the composting process is completed. The final product is given away to private citizens for landscaping purposes, or used as cover material at the Class III disposal cell. Since no wastewater sludge is mixed with the yard waste during compost production, no substantial amount of Regulated or Hazardous gas is generated as a result of this operation. Therefore, possible emissions from this operation is considered Fugitive in this Application.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

4 - LANDFILL LEACHATE MANAGEMENT SYSTEM: Landfill leachate from Cell 7B (and future Cell 8 when operational) is collected and transmitted to a 450,000 gallon leachate holding tank. The collected leachate is pumped automatically to the Orange County Eastern Regional Wastewater Treatment Facility, immediately north of the Orange County Solid Waste Management Facility for treatment and disposal. Landfill gases which enter the leachate collection piping currently escape to the atmosphere. Landfill gases such as methane and non-methane which enter the leachate collection pipings currently escape to the atmosphere. The inventory for the quantity and quality of these gases have been included in the LFG modeling of Cell 7B and do not need to be included as a separate source in the overall emissions inventory of the Facility.

5 - MATERIALS RECOVERY FACILITY: The Materials Recovery Facility (MRF) receives residential and commercial recycled materials collected by Orange County franchised haulers. These materials are further sorted and shipped out to recycling markets by County contracted firms. The recycled materials delivered to the MRF include paper products, plastic products, glass and metals. Therefore, no substantial gases are generated as a result of this operation.

DEP Facility Comment

Facility Contact

1. Name and Title of Facility Contact :

   Mr. Michael L. Chandler
   Manager, Solid Waste Department

2. Facility Contact Mailing Address :
   Organization/Firm : ORANGE COUNTY SOLID WASTE DEPT.
   Street Address : P.O. BOX 720067
   City : ORLANDO State : FL Zip Code : 32872-0067

3. Facility Contact Telephone Numbers :
   Telephone : (407)836-6600 Fax : (407)836-6658

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : East (km) : North (km) :			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : Longitude (DD/MM/SS) :			
3. Governmental Facility Code :	4. Facility Status Code :	5. Facility Major Group SIC Code +	6. Facility SIC(s) :
7. Facility Comment :			
DEP Facility Comment : +			

Facility Contact

1. Name and Title of Facility Contact :
2. Facility Contact Mailing Address : Organization/Firm : Street Address : City : State : Zip Code :
3. Facility Contact Telephone Numbers : Telephone : Fax :

Property Boundary

UTM Coordinates :

Zone : + East : km + North : km +

Building Identification

Identification of Building on Plot Plan or Flow Diagram :

+

Building Height : FT +

Building Boundary

UTM Coordinates :

Zone : + East : km + North : km +

Facility Contact

1. Name and Title of Facility Contact :

Name : Mr. Michael L. Chandler
Title : Manager, Solid Waste Department

2. Facility Contact Mailing Address :

Organization/Firm : ORANGE COUNTY SOLID WASTE DEPT.
Street Address : P.O. BOX 720067
City : ORLANDO
State : FL Zip Code : 32872-0067

3. Facility Contact Telephone Numbers :

Telephone : (407)836-6600 Fax : (407)836-6658

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

Section 60.752(2)(b) of 40 CFR Parts 51, 52, and 60 requires an MSW landfill with a design capacity greater than or equal to 2.5 million mega-grams or 2.5 million metric tons be considered a Major Source of Air Pollution, and submit an annual Emissions Report to the Administrator. The Orange County Solid Waste Facility, with a current Design Capacity of approximately 6.5 million Metric Tons (mega-grams), falls under this category.

Chapter 62-213 of the Florida Administrative Code stipulates the permit requirements for major sources of air pollution, also known as Title V sources. Under this rule, landfills are considered major sources if they emit or have the potential to emit gas at or above the following thresholds: (1) 10 tons per year of any single hazardous air pollutants (HAPs); (2) 25 tons per year of any combination of hazardous air pollutants; or (3) 100 tons per year of any regulated air pollutants (RAPs).

The estimated air emissions for the Orange County Solid Waste Facility exceeds these thresholds. Landfills that are classified as major air pollution sources under Chapter 62-213, F.A.C. are required to apply for a Title V Operation Permit from FDEP.

Ozone SIP Facility : +

Annual Operating Report Required : +

B. FACILITY REGULATIONS

Rule Applicability Analysis

1. DESIGN CAPACITY THRESHOLD ANALYSIS:

   a. Cell 7B Design Capacity = 2,900,000 Metric Tons

   b. Cell 8 Design Capacity = 3,600,000 Metric Tons

TOTAL DESIGN CAPACITY = 6,500,000 Metric Tons

2. EMISSION THRESHOLDS:

Based on the results of landfill gas modeling and laboratory analyses of random LFG gas samples, the annual quantity of volatile organic compounds emissions, indicative of HAPs and RAPs, were calculated. These calculations, included in Exhibit G, show the OCSWF currently exceeds emission thresholds. To summarize the results of the calculations, the current estimated annual mass emissions is 37.48 Mg (metric tons). This quantity is projected to peak in the year 2002 at an estimated 81.85 Mg (metric tons) on an average yearly basis.

These emissions estimates are based on current landfill operation methods. Once the active landfill gas collection and flare system is constructed and becomes operational, emissions from the landfill will be substantially reduced.

B. FACILITY REGULATIONS

List of Applicable Regulations

See Exhibit E for list of applicable Facility Regulations.

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
VOC	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted : VOC

2. Requested Emissions Cap : (lbs/hour) (tons/year)

3. Basis for Emissions Cap Code : RULE

4. Facility Pollutant Comment :

The estimated annual emissions for 1996 are shown in detail in Exhibit G of this application. The majority of these emissions are generated in the existing Controlled Landfills. It is anticipated that these emissions will be substantially reduced by thermal oxidation once the proposed flare station is constructed and operating.

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	EXHIBIT A
2. Facility Plot Plan :	EXHIBIT B
3. Process Flow Diagram(s) :	NA
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	EXHIBIT C
6. Supplemental Information for Construction Permit Application :	NA

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	EXHIBIT C
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	NA

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility +

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : * 1,500 acre Solid Waste Management Facility Description of Emissions Unit for AIRS Tracking : + 1,500 acre Solid Waste Management Facility		
2. Emissions Unit Identification Number : No ID * [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A *	4. Acid Rain Unit? [ ] Yes [X] No *	5. Emissions Unit Major Group SIC Code : 99 +
6. Emissions Unit Comment :		

This Emissions Unit consists of the collective solid waste-related operations and activities on the grounds of the 1,500 acre Facility. Therefore, there is no single, individual point source within this Facility that can be listed for the purpose of this Application.

It is requested that all operations and activities on the grounds of this Facility be considered as one unit at this time. The County may request to modify this designation once the permit application for construction of the active landfill gas system is submitted to FDEP, or when the landfill activities are expanded to the adjoining County property in the future.

PERMIT SHIELD REQUEST: Based on the information provided in this application, the Orange County Utilities Division requests the following determinations during the review of this application and issuance of the Air Operating Permit for the Orange County Solid Waste Management Facility:

A. This permit application is submitted to FDEP with the expectation that an air operating permit will be issued that will contain a permit shield as provided by F.A.C. 62-213.460 for all applicable requirements that are specifically identified in the permit.

B. Certain requirements in this application have been designated as not applicable to Facility emissions or operations, or being applicable only to a specific regulatory agency. This permit application is submitted to FDEP with the expectation that the operating permit will contain a permit shield for all inapplicable requirements that are specifically identified in this application.

C. The Orange County Utilities Division anticipates that its assessment of insignificant emission units at the Facility will be reviewed and incorporated into the permit shield.

D. This permit application is submitted to FDEP with the expectation that any permit requirement that is not federally enforceable will be specifically designated in the permit as a non-federally enforceable, state only requirement.

E. The Orange County Utilities Division reserves the right to submit a revised list of permit shield request during the review process of this application, or at the time of construction permit application for construction of the active landfill gas collection and flare system.

DEP Emissions Unit Comment :

Similar-Emissions Unit Identification Numbers for Fee Purposes :

+

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Emissions Unit Control Equipment 1

1. Description :
2. Control Device or Method Code : *

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Emissions Unit Details

1. Initial Startup Date :	01-Jan-1971
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : N/A	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	Degrees Fahrenheit Seconds Degrees Fahrenheit
Emissions Unit Type Code : 99 +	
Ozone SIP Base Emissions Unit : +	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate :		
5. Operating Capacity Comment : N/A		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week

	52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Rule Applicability Analysis

EMISSION THRESHOLDS:

Based on landfill gas modeling and the results of laboratory analyses of random LFG gas samples, the annual quantity of VOCs (as HAPs and RAPs) emissions was calculated. These calculations, which are included in Exhibit G of this submittal, show that this Facility currently exceeds permissible thresholds.

To summarize the results of the calculations, it was estimated that the annual mass emissions from this Facility at the present time equals 37.48 Mg (metric tons) on an annual yearly basis, and is projected to peak in the year 2002 to an estimated 81.85 Mg (metric tons) on an average yearly basis.

Based on Section 60.752(2)(b) of 40 CFR Parts 51, 52, and 60, this solid waste facility exceeds the design capacity threshold. Based on 62-213 F.A.C., this solid waste facility emits or has the potential to emit gas at or above the thresholds.

The estimated emissions are based on site-specific data and will be reduced substantially once the active landfill gas collection and flare system is developed and becomes operational.

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

List of Applicable Regulations

See Exhibit F for list of applicable regulations for this emission unit.

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	N/A
2. Emission Point Type Code :	3 *
3. Descriptions of Emission Points Comprising this Emissions Unit :	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : N/A	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	°F *
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
Good Engineering Practice Height :	+
14. Emission Point Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : N/A	
2. Source Classification Code (SCC) : *	
3. SCC Units :	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : Percent Sulfur Limit : +	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - VOC *	*		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Pollutant Detail Information : Pollutant 1

1. Pollutant Emitted : **VOC** *
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 20.56 lb/hour 81.85 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: 4 5.00 to 25.00 tons/year
6. Emissions Factor : Reference : Unit Code : +*
7. Emissions Method Code : 3 *
8. Calculations of Emissions : SEE EXHIBIT G
9. Pollutant Potential/Estimated Emissions Comment : The annual emissions estimate for 1996 is provided in Exhibit G of this Application. The majority of these emissions are generated in the existing Controlled Landfills. It is anticipated, that these emissions will be substantially reduced by thermal oxidation once the proposed Flare Station is constructed and operational.

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code : RULE *
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units : * *   Allowable Emissions Unit :
4. Equivalent Allowable Emissions :   lb/hour tons/year
5. Method of Compliance :   The Environmental Compliance Personnel at the Facility are required by a condition of the existing Operating Permit to monitor landfill gas probes on a quarterly basis, and record any migration of LFG beyond the boundaries of the disposal cells. Other compliance and operational modifications are planned for the proposed active LFG system.   Compliance Method Code : +* Compliance Test Frequency : +*   Fequency Base Date : +   Regulation : +*
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Emissions Unit Information Section _____

Pollutant Information Section _____

Allowable Emissions Information Section _____

Test Methods

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : *
2. Basis for Allowable Opacity : *
3. Requested Allowable Opacity : Normal Conditions : % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : N/A
5. Visible Emissions Comment : N/A Compliance Test Frequency : 0 + Frequency Base Date : + COM Required : + Regulation : +*

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section _____

Continuous Monitoring System Continuous Monitor _____

1. Parameter Code : *	2. Pollutant(s):
3. CMS Requirement	CMS Requirement Code : +
4. Monitor Information Manufacturer : Model Number Serial Number	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	
Performance Specification Test Status : + Certification Date (DD-MON-YYYY) : +	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : U	SO2 : U	NO2 : U

4. Baseline Emissions :

PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year

5. PSD Comment :

No thermal oxidation units currently exist on-site. Therefore, the increment consuming emissions do not apply to this Facility at this time.

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Supplemental Requirements for All Applications

1. Process Flow Diagram :	NA
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Orange County

Public Utilities Division
109 East Church Street
Orlando, Florida 32801-3318
Telephone (407) 836-7000

August 8, 1996

State of Florida
Department of Environmental Protection
Division of Air Resources Management
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

Attention: Mr. John Brown

RE: Addendum No. 1 to Application for Air Operation Permit
Orange County Solid Waste Management Facility

Dear Mr. Brown:

Enclosed please find five (5) copies of Addendum No. 1 to the application for Air Operation Permit submitted to FDEP on June 14, 1996, for the Orange County Solid Waste Management Facility. This addendum replaces and supersedes Exhibits E and F for Federal and State Regulatory applicability related to the Facility.

The Application processing fee for the amount of $10,375.00 (Orange County Check No. 575444) is also enclosed with this submittal.

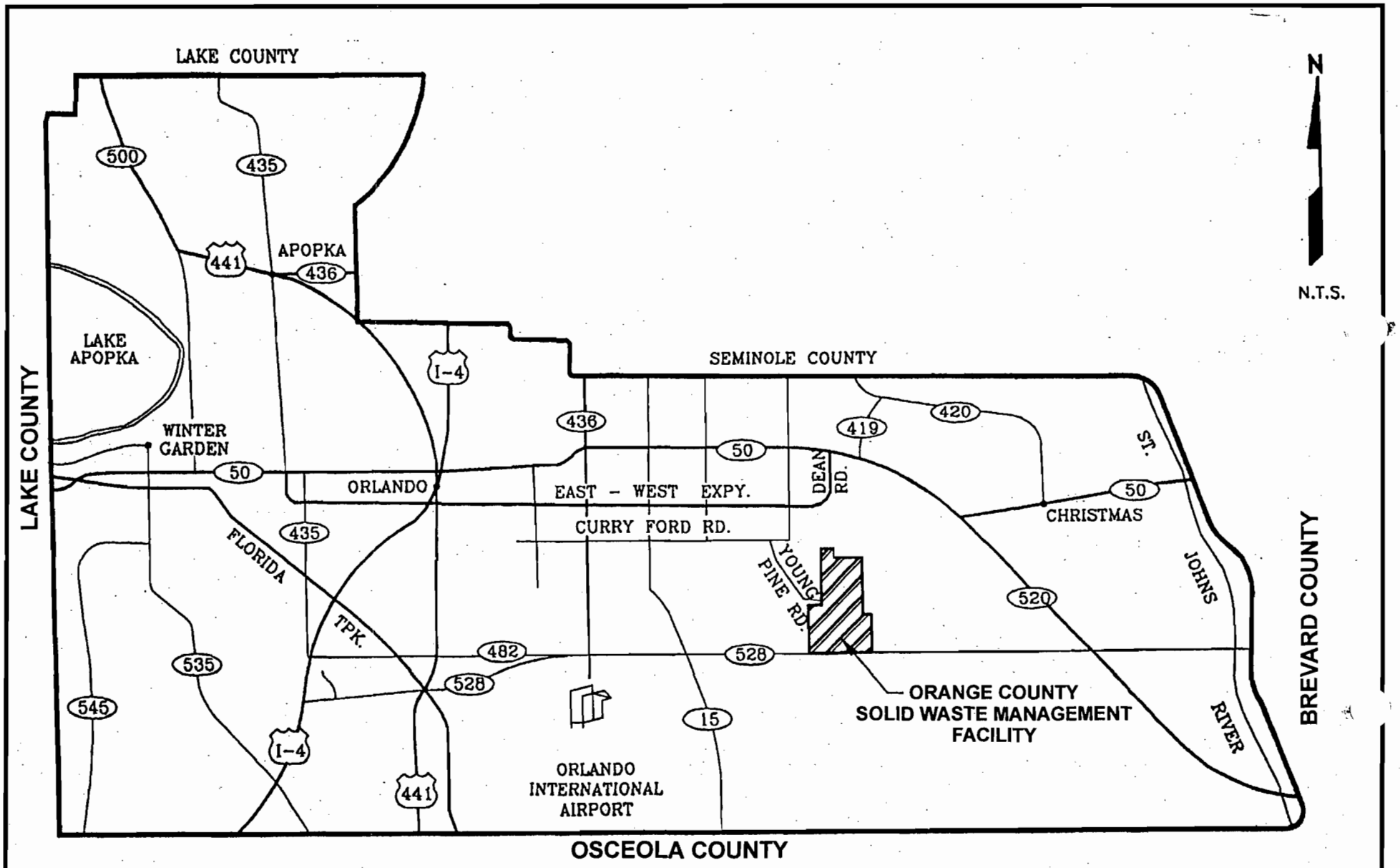
If you have any questions about this application or require additional information, please don't hesitate to contact me at (407) 836-7217.

Very truly yours,

Karen A. Allen, P.E., Manager
Utilities Engineering Department
Orange County Utilities

KAA/db

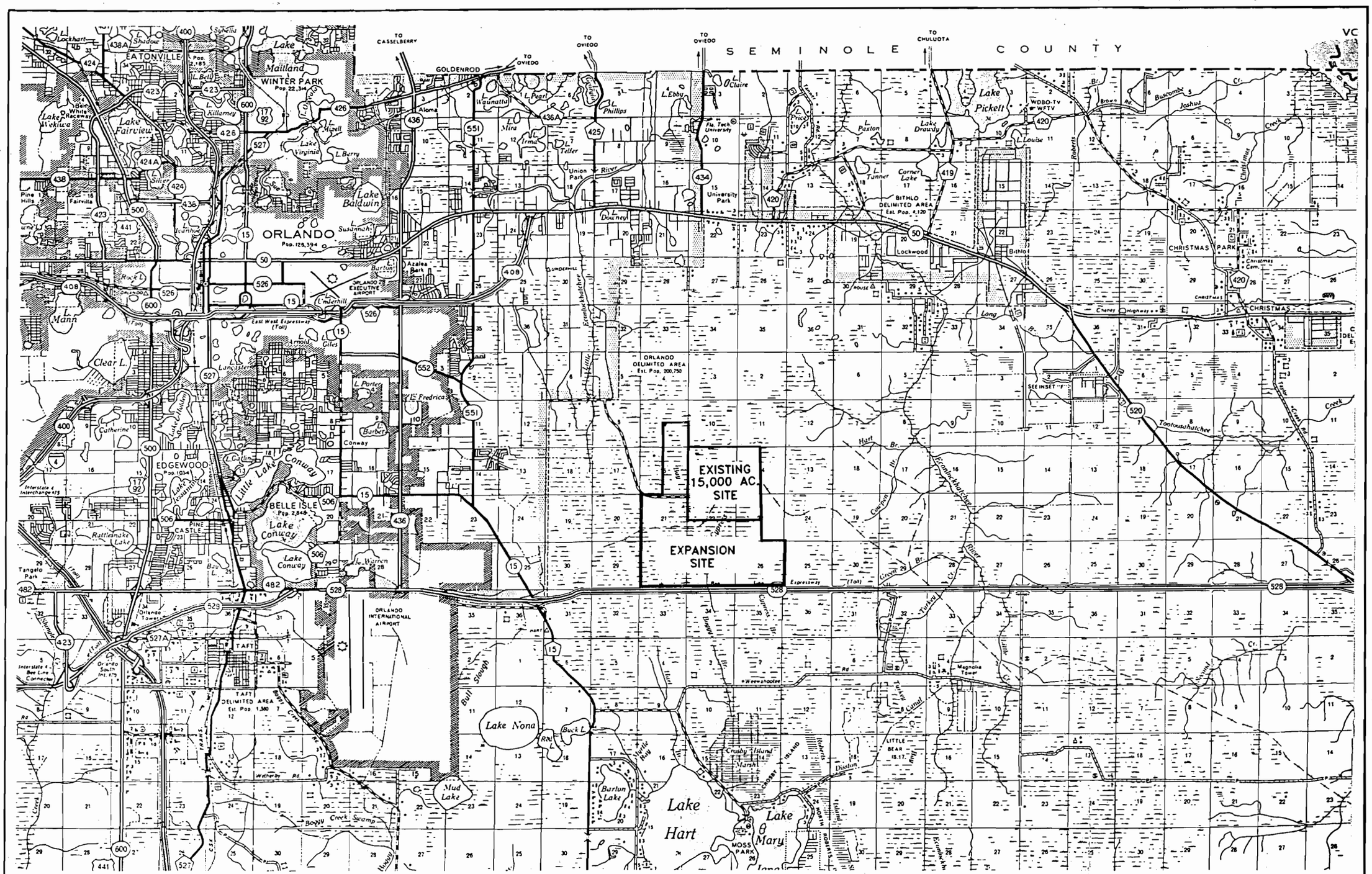
c: Alan B. Ispass, P.E., Director, Orange County Utilities Division
Michael Chandler, Manager, Solid Waste Department, Orange County Utilities Division



ORANGE COUNTY GENERAL LOCATION SOLID WASTE MANAGEMENT FACILITY ORANGE COUNTY, FLORIDA

EXHIBIT A

CH2M/G&R



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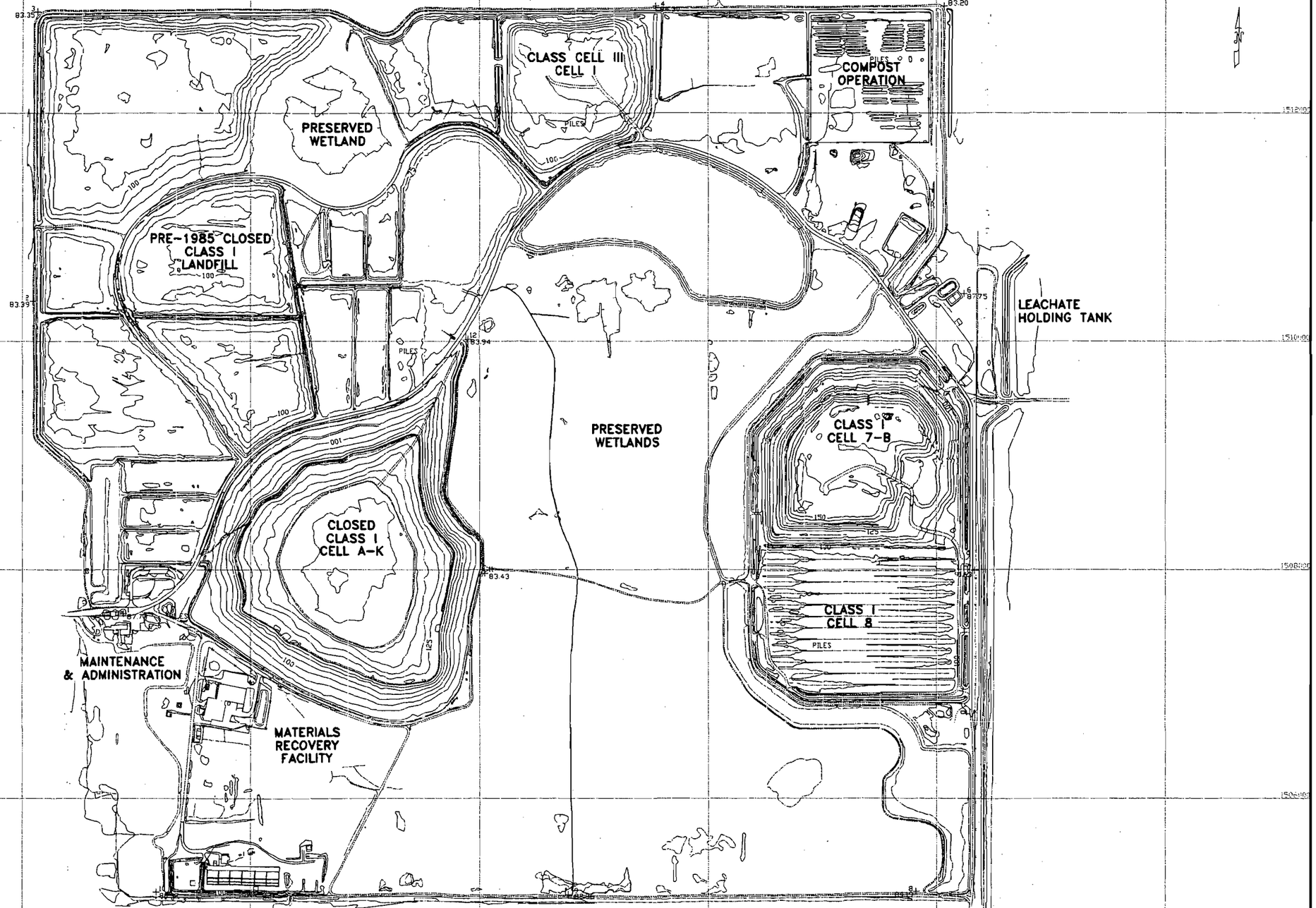

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DESIGNED		DATE
DRAWN		DATE
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APPROVED		DATE
CADD FILE NAME	B1-1.DWG	

CH2M/G&R
THE JOINT VENTURE

EXHIBIT B-1

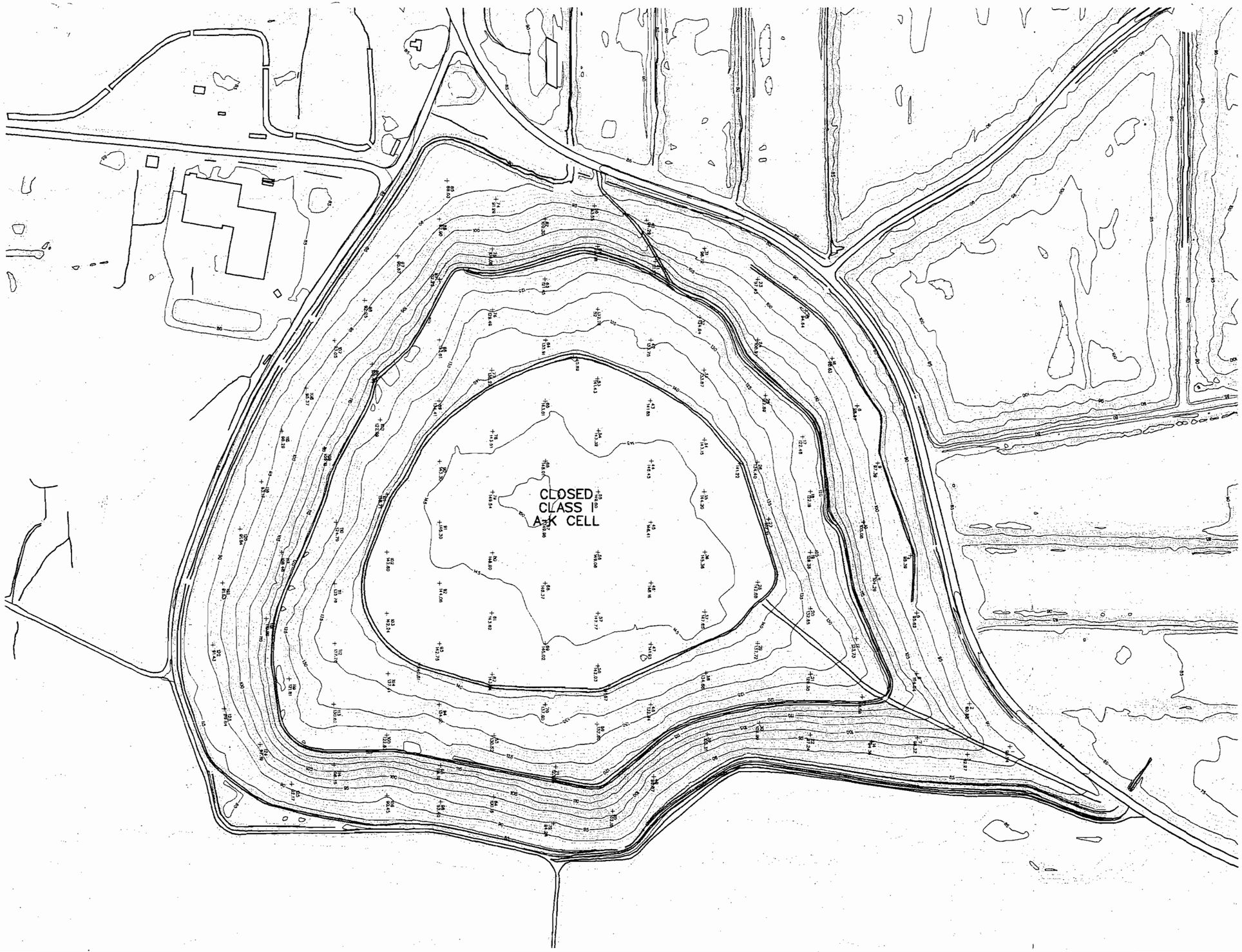
SOLID WASTE MANAGEMENT FACILITY
ORANGE COUNTY, FLORIDA

SHEET OF

DWG. NO.

SCALE:

PROJ. NO.



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					APPROVED		DATE				
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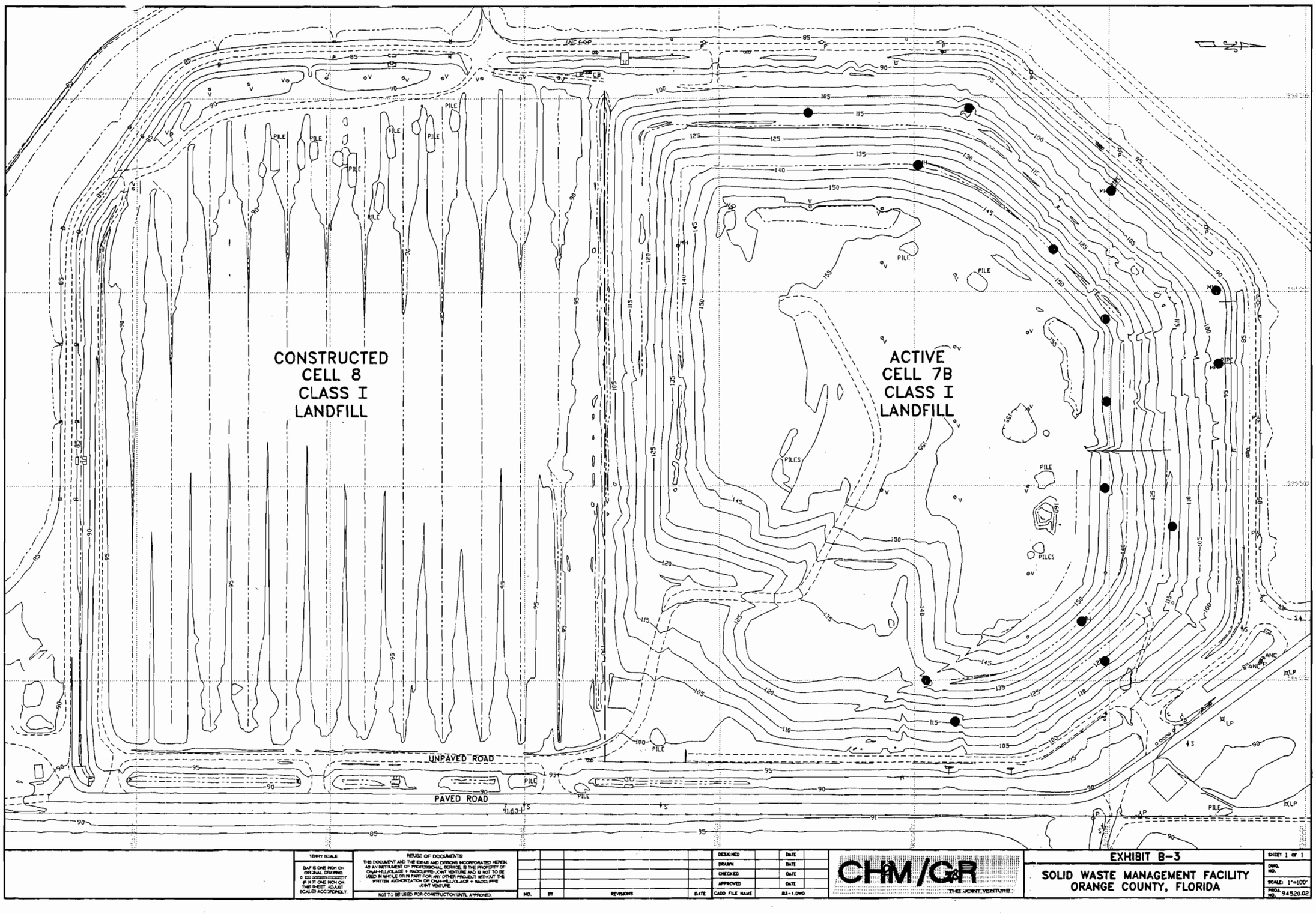

VERIFY SCALE

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NOT TO BE USED FOR CONSTRUCTION UNTIL APPROVED.

NO.	BY	REVISIONS	DATE

DESIGNED		DATE
DRAWN		DATE
CHECKED		DATE
APPROVED		DATE
CADD FILE NAME	B3-1.DWG	

CH2M/G&R
THE JOINT VENTURE

EXHIBIT B-3

SOLID WASTE MANAGEMENT FACILITY
ORANGE COUNTY, FLORIDA

SHEET 1 OF 1
DWG. NO.
SCALE: 1"=100'
PROJ. NO. 94520.02

EXHIBIT C
INSIGNIFICANT & FUGITIVE EMISSION SOURCES

This exhibit summarizes sources and equipment at the landfill which may considered to be fugitive or insignificant sources.

- **FUGITIVE EMISSIONS**

Table 1 provides a summary of fugitive sources as currently exist at the landfill along with the rational for their designation as fugitive.

TABLE 1
SUMMARY OF FUGITIVE EMISSION SOURCES

Source	Rational/Status	Comments
Pre-1985 closed Class I landfill cells	F.A.C. 62-701.600	FDEP Permit No. SF48-215352
~~Yardwaste composting operation~~	F.A.C. 62.701.520	FDEP Permit No. SO48-205046
Existing Class III active landfill	F.A.C. 62.701.340 (3) (d)	FDEP Permit No. SO48-212592
~~Vehicular traffic~~ on paved roads	F.A.C. 62.701.500 (12)	
Leachate Collection System	F.A.C. 62.701.500 (5) (b)	
Borrow pit activities	F.A.C. 62.701.400	FDEP Permit No. MS48-213441
Asbestos disposal area	F.A.C. 62.701.520 (4)(a)	

Comparatively, the emissions from these fugitive sources may be insignificant. Since no actual field measurements have been taken to estimate the emissions from these fugitive sources, it is assumed that the fugitive emissions are equal to 10% of the estimated emissions from the combined A-K and 7B Class I Landfills.

- **INSIGNIFICANT ACTIVITIES**

Table 2 summarizes the list of equipment, activities and operations with insignificant emissions.

TABLE 2 LIST OF INSIGNIFICANT ACTIVITIES	
Source Description	**Insignificant Status**
Vehicle and Landfill Maintenance Activities	
SHOP	
Welding equipment	
Gas dispensing	F.A.C. 62-252.300
Diesel dispensing	F.A.C. 62-252.300
Propane Tank	F.A.C. 62-762
Painting equipment (limited to aerosol cans)	
Special waste containers (Antifreeze, transmission/hydraulic oils, motor oils)	F.A.C. 62-701.520
High pressure washer	
Steam Cleaner	
Calibration gases (for equipment)	F.A.C. 62-242.400 (5)
Safety-Kleen station	
Vehicle maintenance	F.A.C. 62-242.400
Truck wash	
Mobile fuelers (3)	F.A.C. 62-252.500
Mobile truck lube (3)	F.A.C. 62-242.400
STORAGE TANKS	

TABLE 2 LIST OF INSIGNIFICANT ACTIVITIES	
Source Description	**Insignificant Status**
1,000-gallon unleaded gas (1)	F.A.C. 62-762
500-gallon hydraulic oil (2)	F.A.C. 62-762
500-gallon Engine oil (1)	F.A.C. 62-762
12,000-gallon underground diesel fuel (2)	F.A.C. 62-762
2,800-gallon mobile fuel tanker dispenser (1)	F.A.C. 62-762
Kerosene, grease, oil, drums (55 gal. each)	F.A.C. 62-762
Wastewater & Leachate Management	
Leachate holding tank	F.A.C. 62-701.500 (8) (d)
6,000-gallon leachate storage tank (Material Recovery Facility)	F.A.C. 62-701.400 (6) (b) (6) (c)
Wastewater and leachate collection system	F.A.C. 62-604
Pump stations	F.A.C. 62-604
Leachate collection systems	F.A.C. 62-701.500 (5) (b)
Cleanouts at wastewater force mains	F.A.C. 62-604
Air Release Valves on force mains	F.A.C. 62-604
Cleanouts at leachate collection laterals	F.A.C. 62-701.500 (8) (d)
2,000-gallon Septic tanks (4)	F.A.C. 62-600.630
Landfill Gas Management	
Landfill gas migration detection probes (8)	F.A.C. 62-701.400 (10)
Household Hazard Waste Drop-off Area at Citizen Center	
Exhaust fans in the enclosed storage bldgs. (3)	
2,000-gallon waste oil storage tank (1)	F.A.C. 62-762
Used waste chemical storage - 42 gallon drums	F.A.C. 62-762
100-gallon(igloo) waste oil storage tank (1)	F.A.C. 62-762

TABLE 2 LIST OF INSIGNIFICANT ACTIVITIES	
Source Description	**Insignificant Status**
Miscellaneous Activities	
Air compressor (electrically operated) (3)	Used at various locations at the landfill
Air compressor (gasoline operated) (8)	Used at various locations at the landfill
Stormwater ponds (5)	F.A.C. 17-302
Groundwater monitoring wells (82)	F.A.C. 17-701.510 (3) (d) (6)
Roads (sweep and water for dust control)	F.A.C. 17-701.500 (11) (e)
Waste dump into landfill	F.A.C. 17-701.500 (7) (c)
Daily cover placement	F.A.C. 17-701.500 (7) (e) (6)
Office activities	F.A.C. 62-242.400 (1) & (2)
Staff vehicles (37)	F.A.C. 62-242.400 (1) & (2)
Bathroom vents (15)	
Window air conditioners (4)	F.A.C. 62-213.300 (3) (p) (1)
Central air conditioner compressors (9)	F.A.C. 62-213.300 (3) (p) (1)
Ventilation fans (7)	
Exhaust vent	
Unrelated Activities	
500-gallon above ground diesel fuel	F.A.C. 62-762
Window air conditioners (3)	F.A.C. 62-213.300 (3) (p) (1)
Central air conditioner compressors (6)	F.A.C. 62-213.300 (3) (p) (1)
Bathroom vents (2)	

* Numbers in parentheses represent the number of units

EXHIBIT D
LANDFILL GAS QUANTITY & QUALITY
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

A landfill gas modeling was performed to determine the quantity of gas generated from Class I disposal cells at the Orange County Facilities. The modeling indicates that currently these cells emit approximately 5,437 scfm of methane, non-methane organic compounds and other gases as a result of waste decomposition. It is estimated that the emissions from these landfills will peak in the year 2002 to an estimated 7,139 scfm on an average yearly basis.

Gas sampling for laboratory analyses was performed in April 1996, at three vent locations (37, 53, 103) located at cells A through K, and three vents (28, 38, 6) located at the new active cell.

All organic compounds were removed into Summa containers. Tedlar bags were utilized for sulfur compounds. The results of the laboratory analysis are enclosed.

Also, a field analysis was performed in April 1996, utilizing the Landtech GEM-500 gas analyzer. The GEM-500 was connected to a Landtech Accuflow Wellhead, attached to the individual gas vent. The GEM-500 was calibrated twice daily following the general manufacturer's recommendations on calibration procedures. All sampling and analytical procedures were obtained from the instrument manufacturer (Landtech) and followed according to manufacturer's specifications.

Appendix D

LANDFILL GAS ESTIMATE MODELING REPORT
ORANGE COUNTY LANDFILL
October, 1995

Introduction

CH2M/G&R, The Joint Venture (Engineer) has estimated gas generation over the life of the Orange County, Florida landfill. Separate estimates were made for the A-K cells and the 7B-8 cells. Results are shown in Table 1 and graphically in Figure 1.

The estimates for Cells A-K are based on the tonnage input data given in a report on landfill gas generation completed by the University of Central Florida (UCF)[1]. The UCF report stated that its estimates of tonnage deposited were based on a review of "monthly tonnage reports and filling maps indicating sites used during particular time periods. It was assumed that filling in cells A-K stopped in April, 1991 per the UCF report. The tonnage disposal in Cells 7B-8 begins in 1992 and is from the Orange County Landfill Master Plan, Table 1, which shows projections to 2005. (For 1991, the known amount disposed in Cells A-K, 230,000 tons, was subtracted from the projection for Cells 7B-8; the total for both cells is as shown in the table.)

The Engineer has developed a model of gas generation from municipal solid waste (MSW) landfills, which has been successfully used to size equipment for landfill gas collection and combustion facilities at many landfills. Because of the interest in recovering landfill gas for its energy value, a number of quantitative landfill gas generation models have been developed. The Engineer's model has been found to yield results similar to other landfill gas generation rate estimation models reported in the literature (Emcon, 1980).

Modeling Approach

The modeling approach is to develop a unit curve representing gas generation rate, plotted against time, from a unit mass of MSW placed in a landfill. The unit curves of gas generation for successive annual increments of waste disposal are then positioned with their starting points at appropriate times and superposed to yield a curve of expected gas generation from the entire landfill. Disposal of refuse is assumed to occur in annual increments for modeling purposes. The unit curve is modeled as a four-stage process, as described below.

Stage 1: Lag Phase. A lag phase occurs during which methanogenic bacteria cannot compete with aerobic and other organisms in the refuse. The refuse is purged of oxygen during this phase and methanogenic bacteria establish themselves. The time length of the lag phase is a function of the composition and moisture content of the refuse.

---

[1] Model Estimation of Gas Generation Rates, Phase 1 Report, Investigation of Gas Emissions at the Orange County Landfill, by Reinhart, D.R, et. al., University of Central Florida, May 31, 1993.

Stage 2: Rising Phase. Methane generation increases until a peak generation rate is reached. The rate is assumed to increase linearly with time to the peak generation rate over a relatively short time period (typically 2 to 5 years). The length of the rising phase and the peak methane generation rate are functions of the refuse composition and moisture content. The peak methane generation rate varies between 0.08 and 0.20 standard cubic feet of methane per pound of wet refuse per year for typical municipal solid waste, based on observations from landfill methane extraction systems (Emcon, 1980).

Stage 3: Stable Phase. The peak generation rate is maintained in a nutrient-limited steady-state for a number of years. The length of time of the stable phase is a function of the composition and moisture content of the waste, and is typically less than five years.

Stage 4: Declining Phase. The declining phase, which constitutes most of the length of the unit methane generation versus timecurve, is modeled by an exponential decay equation that approaches zero asymptotically. The equation was derived from a statistical analysis of observations of gas generation from decomposing MSW in a laboratory-controlled anaerobic environment (Hartz, 1980).

Model Inputs

Gas generation from the landfill is modeled based on the following input parameters:

- Tonnage of municipal solid waste disposed each year.
- Fraction of the waste that is decomposable.
- Fractions of the decomposable waste that are moderately and readily decomposable.
- Moisture content of the waste.

Composition of MSW

An important determining factor of the total amount and rate of gas generation from a unit mass of MSW is the weight fraction of the waste that is organic and can be broken down by anaerobic bacteria to produce landfill gas. Unless site-specific data are available to use as inputs to the model, the waste stream has been assumed to have an inert material content of between 25% and 35% by weight. Of the decomposable organic fraction of the refuse that contributes to gas production, the readily decomposable portion has been assumed to be between 25% and 45% by weight, and the moderately decomposable portion has been assumed to be between 50% and 70% by weight. The refuse composition reflected in these assumptions is derived from reports on the composition of typical municipal solid waste in the U.S. reported by EPA (Franklin Associates, 1986) and the American

Public Works Association. For the Orange County Landfill, the refuse composition has been assumed to be typical of U.S. municipal solid waste.

Moisture Content

Moisture content is considered an important determinant of the rate of gas generation in landfills. The anaerobic organisms that produce landfill gas function most prolifically in an aqueous environment. Maximum gas production in MSW landfills has been reported as occurring under saturated conditions, which occur at 60% moisture content (% wet weight) or greater (Songohuga, 1969). Moisture content at the time of disposal typically varies from 15% to 40% (Tchobanoglous, 1977). The peak rate of gas production, the rate of increase in gas production to the peak rate, and the length of the period of peak gas production are assumed to vary in direct proportion to the moisture content of the wastes. The moisture content for the Orange County Landfill was assumed to be an average of 40%.

REFERENCES

Emcon Associates. 1980. Methane Generation and Recovery from Landfills. Ann Arbor Science Publishers, 1980.

Hartz, K.E. 1980. Studies of Methanogenesis in Samples from Landfills. Ph.D. Dissertation, University of Wisconsin-Madison. August, 1980.

Franklin Associates. 1980. Characterization of Municipal Solid Waste in the United States 1960-2000. Prepared for USEPA Office of Solid Waste. July 1986 (NTIS No. PB87-178323).

Songohuga, O. Acid, Gas and Microbial Dynamics in Sanitary Landfills. Ph.D Dissertation, University of West Virginia, Morgantown, West Virginia, 1969.

Tchobanouglous, G., et.al. Solid Wastes, Engineering Principles and Management Issues, McGraw Hill, 1977, p. 57.

****LFGGEN24****12/30/92
ASSUMPTIONS: SHADED CELLS REQUIRE INPUT

FIRST YEAR:	1991	*	ALT+F3 TO START MACRO
LAST W. YR:	2001	*	
LAST GAS YR:	2020	*	*NOTIFY TOM KRAEMER/WDC BEFORE
WASTE YRS=	11	yrs	USING, TO MAKE SURE YOU HAVE
TOTAL YRS=	30	yrs	LATEST VERSION*
MC=	40.00	% * (20% TO 60% is typical range)	
REDFRAC=	0.35	* Fraction of ORGANIC PORTION of waste (.35 is typ. US MSW)	
MODFRAC=	0.61	* Fraction of ORGANIC PORTION of waste (.61 is typ. US MSW)	
ORGFRAC=	0.71	* Fraction of total waste, wet basis (.71 is typ. US MSW)	
LFGFACT=	0.58	NOTE: REDFRAC+ MODFRAC should be slightly less than 1.0	
TLAG=	0.5	yrs	
K=	1.5	/yrs	

INTERMEDIATE RESULTS:

TRISE=	3	yrs
PLATEND=	7.5	yrs
QMAX=	0.132666667	cf/lb/yr
A=	0.073005714	

INPUT WASTE QUANITIES UNDER COLUMN LABELED WASTE IN ASCENDING ORDER *

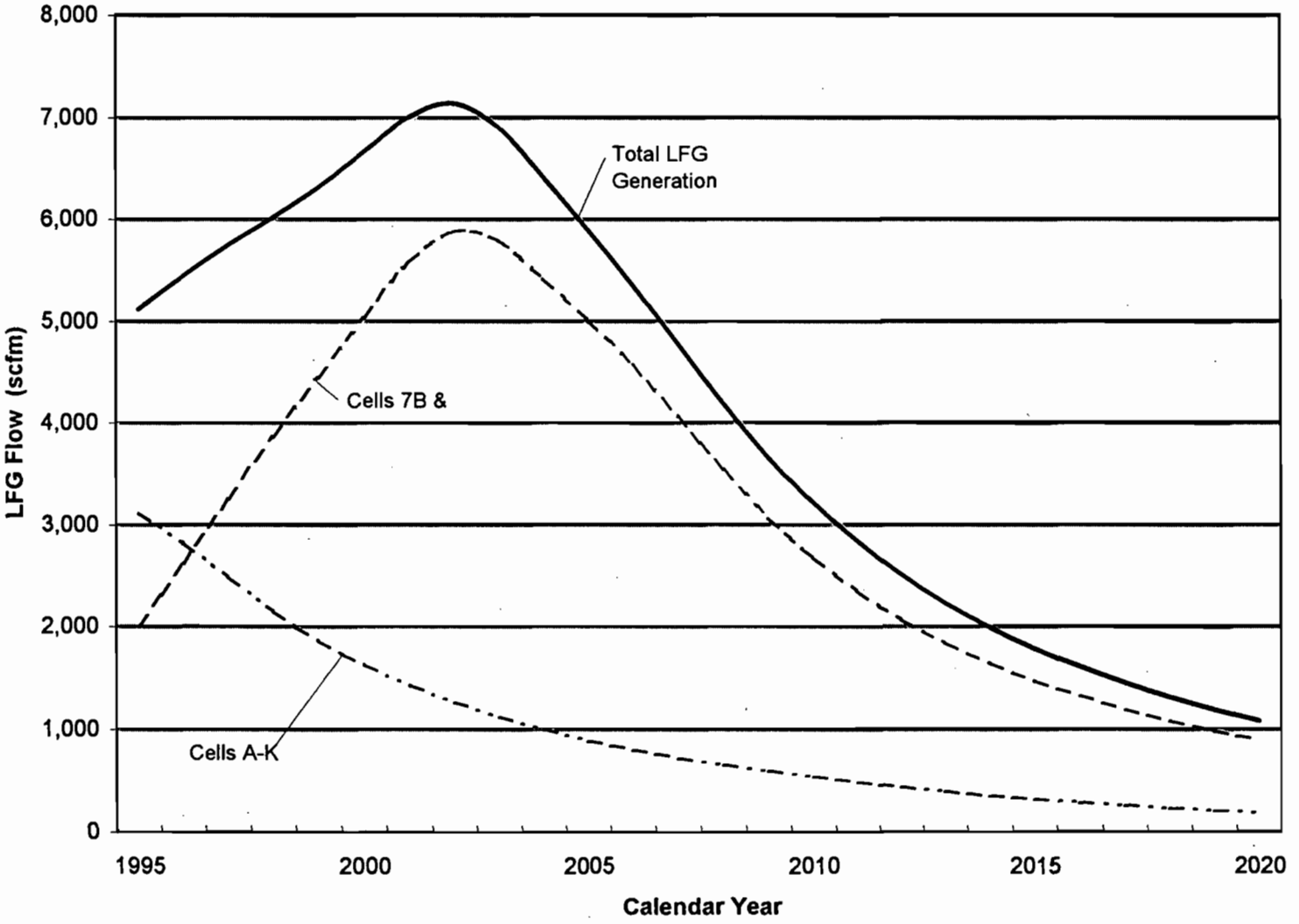
LANDFILL NAME:

TIME (yr)	WASTE (tons)	RATE-CH4 (cf/min)	CUM CH4 PRODUCED (MM cf)	TOTAL LFG RATE (cf/min)
1991	507,462	51.24	0.00	88.34
1992	618,761	216.18	80.79	372.72
1993	625,564	506.75	313.94	873.71
1994	673,629	826.03	712.36	1424.19
1995	728,113	1161.89	1284.40	2003.25
1996	718,169	1517.45	2043.86	2616.29
1997	754,077	1885.63	2994.93	3251.08
1998	791,781	2241.32	4130.96	3864.35
1999	886,480	2580.39	5440.17	4448.95
2000	988,669	2919.05	6921.96	5032.85
2001	692,000	3234.85	8585.47	5577.32
2002	0	3410.65	10378.11	5880.44
2003	0	3359.82	12144.03	5792.80
2004	0	3145.75	13797.44	5423.71
2005	0	2909.12	15326.47	5015.73
2006		2648.23	16718.38	4565.91
2007		2359.22	17958.38	4067.62
2008		2055.66	19038.84	3544.24
2009		1780.15	19974.49	3069.23
2010		1552.35	20790.40	2676.46
2011		1362.25	21506.39	2348.70
2012		1202.29	22138.32	2072.91
2013		1066.67	22698.96	1839.08
2014		950.89	23198.75	1639.47
2015		851.43	23646.26	1467.99
2016		765.49	24048.60	1319.81
2017		690.82	24411.70	1191.07
2018		625.63	24740.53	1078.68
2019		568.45	25039.31	980.09
2020		518.08	25311.61	893.23

TABLE 1. ORANGE COUNTY LANDFILL LFG PROJECTIONS

YEAR	WASTE INPUT (TONS)	CELLS A-K (scfm)	CELLS 7B,8 (scfm)	TOTAL (scfm)
1973	80,000	14	0	14
1974	120,000	63	0	63
1975	120,000	153	0	153
1976	90,000	252	0	252
1977	0	326	0	326
1978	50,000	366	0	366
1979	0	383	0	383
1980	0	395	0	395
1981	0	376	0	376
1982	0	344	0	344
1983	0	304	0	304
1984	440,000	343	0	343
1985	590,000	564	0	564
1986	580,000	992	0	992
1987	630,000	1,483	0	1,483
1988	580,000	1,984	0	1,984
1989	630,000	2,496	0	2,496
1990	690,000	3,022	0	3,022
1991	737,000	3,477	88	3,565
1992	619,000	3,688	373	4,061
1993	626,000	3,600	874	4,474
1994	674,000	3,379	1,424	4,803
1995	728,000	3,118	2,003	5,121
1996	718,000	2,821	2,616	5,437
1997	754,000	2,488	3,251	5,739
1998	792,000	2,154	3,864	6,018
1999	886,000	1,865	4,449	6,314
2000	989,000	1,626	5,033	6,659
2001	692,000	1,426	5,577	7,003
2002	0	1,259	5,880	7,139
2003	0	1,116	5,793	6,909
2004	0	995	5,424	6,419
2005	0	891	5,016	5,907
2006	0	800	4,566	5,366
2007	0	722	4,068	4,790
2008	0	654	3,544	4,198
2009	0	594	3,069	3,663
2010	0	541	2,676	3,217
2011	0	487	2,349	2,836
2012	0	438	2,073	2,511
2013	0	394	1,839	2,233
2014	0	355	1,639	1,994
2015	0	319	1,468	1,787
2016	0	288	1,320	1,607
2017	0	259	1,191	1,450
2018	0	233	1,079	1,312
2019	0	210	980	1,190
2020	0	189	893	1,082

Figure 1. LFG Generation Estimate
Orange County Landfill



Celebrating 50 Years

May 6, 1996

L.J. Nodarse & Associates
807 South Orlando Ave
Suite A
Winter Park, FL 32789

Dear David Twedell:

RE: Analytical Data for L.J. Nodarse & Associates
CVO Laboratory Reference No. 3018

On April 15, 1996, the CH2M HILL Corvallis Applied Sciences Laboratory received six samples with a request for analysis of selected parameters.

The analytical results and associated quality control data are enclosed. Any unusual difficulties encountered during the analysis of your samples are discussed in the case narrative.

Under CH2M HILL policy, your samples will be stored for 10 days after reporting. If you have not given us prior instructions for disposal, we will contact you if any samples require disposal as hazardous waste.

The CH2M HILL Applied Sciences Laboratory appreciates your business and looks forward to serving your analytical needs again. If you should have any questions concerning the data, or if you need additional information, please call Ms. Kathy McKinley at (541) 758-0235, extension 3120.

Sincerely,

Kelly Ensor
Administrative Assistant

Enclosures

Applied Sciences Laboratory
Corvallis Office
2300 NW Walnut Blvd., Corvallis, OR 97330-3538
P. O. Box 428, Corvallis, OR 97339-0428
541 752-4271
Fax No. 541 752-0276

CLIENT SAMPLE CROSS-REFERENCE

CH2M HILL Applied Science Laboratory Reference No. 3018

CVO Sample ID	Client Sample ID	Date Collected	Time Collected
301801	VENT-37	04/10/1996	11:00
301802	VENT-53	04/10/1996	12:00
301803	VENT-103	04/10/1996	12:30
301804	VENT-28	04/10/1996	13:00
301805	VENT-38	04/10/1996	2:00
301806	VENT 6	04/10/1996	2:30

CASE NARRATIVE
AIR TOXICS GC/MS ANALYSIS

Lab Reference No.: 3018

Client/Project: L.J. Nodarse & Associates

I. Holding Times:
All holding times were met.

II. Analysis:

A. Calibration:
All acceptance criteria were met.

B. Blanks:
All acceptance criteria were met.

C. Duplicate Sample(s):
All acceptance criteria were met.

D. Analytical Exceptions:
None

E. Other:
None

III. Sampling Equipment:
No exceptions.

IV. Documentation Exceptions:
None

V. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, except for the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designee, as verified by the following signature.

Prepared by: Ben Thy DATE: 5/2/96

Reviewed by: Judy Bennett DATE: 5-2-96

CASE NARRATIVE
TOTAL NONMETHANE ORGANIC ANALYSIS

Lab Reference No.: 3018

Client/Project: L.J. Nodarse & Associates

I. Holding Times:
All holding times were met.

II. Analysis:

A. Calibration:
All acceptance criteria were met.

B. Blanks:
All acceptance criteria were met.

C. Duplicate Sample(s):
All acceptance criteria were met.

D. Analytical Exceptions:
None

E. Other:
None

III. Sampling Equipment:
No exceptions.

IV. Documentation Exceptions:
None

V. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, except for the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designee, as verified by the following signature.

Prepared by: Jodi Bennett DATE: 5-2-96

Reviewed by: Ben Thom DATE: 5/2/96

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301801
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT-37	Dilution Factor:	27
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	11:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	27	153	
Ethanol	27	382	
Isopropyl Alcohol	27	715	
1-Propanol	27	197	
Isobutyl alcohol	27	163	
1-Butanol	27	179	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301802
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT-53	Dilution Factor:	53
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	53	53	U
Ethanol	53	1010	
Isopropyl Alcohol	53	3630	
1-Propanol	53	494	
Isobutyl alcohol	53	111	
1-Butanol	53	488	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301803
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT-103	Dilution Factor:	1335
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	1335	34200	
Ethanol	1335	150000	
Isopropyl Alcohol	1335	27500	
1-Propanol	1335	44600	
Isobutyl alcohol	1335	1920	
1-Butanol	1335	18000	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301804
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT-28	Dilution Factor:	1360
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	13:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	1360	7170	
Ethanol	1360	210000	
Isopropyl Alcohol	1360	19600	
1-Propanol	1360	78100	
Isobutyl alcohol	1360	1360	U
1-Butanol	1360	18800	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301805
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT-38	Dilution Factor:	27
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	27	138	
Ethanol	27	3030	
Isopropyl Alcohol	27	270	
1-Propanol	27	1230	
Isobutyl alcohol	27	326	
1-Butanol	27	476	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301806
Sampled By:	D. Twedell	Date Analyzed:	4/29/96
Client Sample ID:	VENT 6	Dilution Factor:	536
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Methanol	536	536	U
Ethanol	536	31600	
Isopropyl Alcohol	536	13800	
1-Propanol	536	8630	
Isobutyl alcohol	536	536	U
1-Butanol	536	4600	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301801
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-37	Dilution Factor:	270
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	11:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	270	151	J
1,2-Dichloro,1,1,2,2-tetrafluoroethane	270	270	U
Chloromethane	270	270	U
Vinyl chloride	270	270	U
Bromomethane	270	270	U
Chloroethane	270	270	U
Trichlorofluoromethane	270	270	U
1,1,2-Trichloro-1,2,2-trifluoroethane	270	270	U
1,1-Dichloroethene	270	270	U
Methylene chloride	270	270	U
1,1-Dichloroethane	270	270	U
cis-1,2-Dichloroethene	270	270	U
Chloroform	270	270	U
1,1,1-Trichloroethane	270	270	U
Carbon tetrachloride	270	270	U
Benzene	270	531	
1,2-Dichloroethane	270	270	U
Trichloroethene	270	270	U
1,2-Dichloropropane	270	270	U
cis-1,3-Dichloropropene	270	270	U
Toluene	270	7610	
trans-1,3-Dichloropropene	270	270	U
1,1,2-Trichloroethane	270	270	U
Tetrachloroethene	270	270	U
1,2-Dibromoethane	270	270	U
Chlorobenzene	270	279	
Ethylbenzene	270	6340	
m,p-Xylene	540	9050	
o-Xylene	270	3760	
Styrene	270	270	U
1,1,2,2-Tetrachloroethane	270	270	U
1,3,5-Trimethylbenzene	270	1850	
1,2,4-Trimethylbenzene	270	4650	
1,3-Dichlorobenzene	270	270	U
1,4-Dichlorobenzene	270	1000	
1,2-Dichlorobenzene	270	270	U
1,2,4-Trichlorobenzene	270	270	U
Hexachlorobutadiene	270	270	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301802
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-53	Dilution Factor:	132
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	132	574	
1,2-Dichloro,1,1,2,2-tetrafluoroethane	132	132	U
Chloromethane	132	132	U
Vinyl chloride	132	132	U
Bromomethane	132	132	U
Chloroethane	132	132	U
Trichlorofluoromethane	132	132	U
1,1,2-Trichloro-1,2,2-trifluoroethane	132	132	U
1,1-Dichloroethene	132	132	U
Methylene chloride	132	132	U
1,1-Dichloroethane	132	132	U
cis-1,2-Dichloroethene	132	132	U
Chloroform	132	132	U
1,1,1-Trichloroethane	132	132	U
Carbon tetrachloride	132	132	U
Benzene	132	247	
1,2-Dichloroethane	132	132	U
Trichloroethene	132	132	U
1,2-Dichloropropane	132	132	U
cis-1,3-Dichloropropene	132	132	U
Toluene	132	4640	
trans-1,3-Dichloropropene	132	132	U
1,1,2-Trichloroethane	132	132	U
Tetrachloroethene	132	132	U
1,2-Dibromoethane	132	132	U
Chlorobenzene	132	132	U
Ethylbenzene	132	2540	
m,p-Xylene	264	3520	
o-Xylene	132	1510	
Styrene	132	132	U
1,1,2,2-Tetrachloroethane	132	132	U
1,3,5-Trimethylbenzene	132	1090	
1,2,4-Trimethylbenzene	132	3450	
1,3-Dichlorobenzene	132	132	U
1,4-Dichlorobenzene	132	875	
1,2-Dichlorobenzene	132	132	U
1,2,4-Trichlorobenzene	132	132	U
Hexachlorobutadiene	132	132	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301803
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-103	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	134	419	
1,2-Dichloro,1,1,2,2-tetrafluoroethane	134	134	U
Chloromethane	134	134	U
Vinyl chloride	134	100	J
Bromomethane	134	134	U
Chloroethane	134	92	J
Trichlorofluoromethane	134	134	U
1,1,2-Trichloro-1,2,2-trifluoroethane	134	134	U
1,1-Dichloroethene	134	134	U
Methylene chloride	134	245	
1,1-Dichloroethane	134	85	J
cis-1,2-Dichloroethene	134	134	U
Chloroform	134	134	U
1,1,1-Trichloroethane	134	134	U
Carbon tetrachloride	134	134	U
Benzene	134	308	
1,2-Dichloroethane	134	134	U
Trichloroethene	134	134	U
1,2-Dichloropropane	134	134	U
cis-1,3-Dichloropropene	134	134	U
Toluene	134	7130	
trans-1,3-Dichloropropene	134	134	U
1,1,2-Trichloroethane	134	134	U
Tetrachloroethene	134	135	
1,2-Dibromoethane	134	134	U
Chlorobenzene	134	90	J
Ethylbenzene	134	6090	
m,p-Xylene	267	9530	
o-Xylene	134	3550	
Styrene	134	134	U
1,1,2,2-Tetrachloroethane	134	134	U
1,3,5-Trimethylbenzene	134	1570	
1,2,4-Trimethylbenzene	134	3900	
1,3-Dichlorobenzene	134	134	U
1,4-Dichlorobenzene	134	985	
1,2-Dichlorobenzene	134	134	U
1,2,4-Trichlorobenzene	134	134	U
Hexachlorobutadiene	134	134	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301804
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-28	Dilution Factor:	136
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	13:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	136	1040	
1,2-Dichloro,1,1,2,2-tetrafluoroethane	136	136	U
Chloromethane	136	136	U
Vinyl chloride	136	449	
Bromomethane	136	136	U
Chloroethane	136	285	
Trichlorofluoromethane	136	122	J
1,1,2-Trichloro-1,2,2-trifluoroethane	136	136	U
1,1-Dichloroethene	136	136	U
Methylene chloride	136	239	
1,1-Dichloroethane	136	296	
cis-1,2-Dichloroethene	136	272	
Chloroform	136	136	U
1,1,1-Trichloroethane	136	95	J
Carbon tetrachloride	136	136	U
Benzene	136	187	
1,2-Dichloroethane	136	136	U
Trichloroethene	136	158	
1,2-Dichloropropane	136	136	U
cis-1,3-Dichloropropene	136	136	U
Toluene	136	11200	
trans-1,3-Dichloropropene	136	136	U
1,1,2-Trichloroethane	136	136	U
Tetrachloroethene	136	420	
1,2-Dibromoethane	136	136	U
Chlorobenzene	136	136	U
Ethylbenzene	136	5040	
m,p-Xylene	272	7110	
o-Xylene	136	2010	
Styrene	136	136	U
1,1,2,2-Tetrachloroethane	136	136	U
1,3,5-Trimethylbenzene	136	573	
1,2,4-Trimethylbenzene	136	1330	
1,3-Dichlorobenzene	136	136	U
1,4-Dichlorobenzene	136	373	
1,2-Dichlorobenzene	136	136	U
1,2,4-Trichlorobenzene	136	136	U
Hexachlorobutadiene	136	136	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie[illegible]ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301805
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-38	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	134	447	
1,2-Dichloro,1,1,2,2-tetrafluoroethane	134	134	U
Chloromethane	134	134	U
Vinyl chloride	134	819	
Bromomethane	134	134	U
Chloroethane	134	247	
Trichlorofluoromethane	134	134	U
1,1,2-Trichloro-1,2,2-trifluoroethane	134	134	U
1,1-Dichloroethene	134	134	U
Methylene chloride	134	134	U
1,1-Dichloroethane	134	122	J
cis-1,2-Dichloroethene	134	182	
Chloroform	134	134	U
1,1,1-Trichloroethane	134	134	U
Carbon tetrachloride	134	134	U
Benzene	134	169	
1,2-Dichloroethane	134	134	U
Trichloroethene	134	134	U
1,2-Dichloropropane	134	134	U
cis-1,3-Dichloropropene	134	134	U
Toluene	134	8120	
trans-1,3-Dichloropropene	134	134	U
1,1,2-Trichloroethane	134	134	U
Tetrachloroethene	134	134	U
1,2-Dibromoethane	134	134	U
Chlorobenzene	134	134	U
Ethylbenzene	134	5580	
m,p-Xylene	268	8060	
o-Xylene	134	2570	
Styrene	134	134	U
1,1,2,2-Tetrachloroethane	134	134	U
1,3,5-Trimethylbenzene	134	809	
1,2,4-Trimethylbenzene	134	2050	
1,3-Dichlorobenzene	134	134	U
1,4-Dichlorobenzene	134	770	
1,2-Dichlorobenzene	134	134	U
1,2,4-Trichlorobenzene	134	134	U
Hexachlorobutadiene	134	134	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied iences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301806
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT 6	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Dichlorodifluoromethane	134	663	
1,2-Dichloro,1,1,2,2-tetrafluoroethane	134	134	U
Chloromethane	134	134	U
Vinyl chloride	134	534	
Bromomethane	134	134	U
Chloroethane	134	145	
Trichlorofluoromethane	134	166	
1,1,2-Trichloro-1,2,2-trifluoroethane	134	134	U
1,1-Dichloroethene	134	134	U
Methylene chloride	134	179	
1,1-Dichloroethane	134	146	
cis-1,2-Dichloroethene	134	311	
Chloroform	134	134	U
1,1,1-Trichloroethane	134	134	U
Carbon tetrachloride	134	134	U
Benzene	134	189	
1,2-Dichloroethane	134	134	U
Trichloroethene	134	220	
1,2-Dichloropropane	134	134	U
cis-1,3-Dichloropropene	134	134	U
Toluene	134	15500	
trans-1,3-Dichloropropene	134	134	U
1,1,2-Trichloroethane	134	134	U
Tetrachloroethene	134	538	
1,2-Dibromoethane	134	134	U
Chlorobenzene	134	134	U
Ethylbenzene	134	5100	
m,p-Xylene	268	10200	
o-Xylene	134	2980	
Styrene	134	134	U
1,1,2,2-Tetrachloroethane	134	134	U
1,3,5-Trimethylbenzene	134	909	
1,2,4-Trimethylbenzene	134	2010	
1,3-Dichlorobenzene	134	134	U
1,4-Dichlorobenzene	134	498	
1,2-Dichlorobenzene	134	134	U
1,2,4-Trichlorobenzene	134	134	U
Hexachlorobutadiene	134	134	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301801
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-37	Dilution Factor:	270
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	11:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	270	2720	
2-Butanone	270	1690	
Methyl Isobutyl Ketone	270	1350	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie[illegible]ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301802
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-53	Dilution Factor:	132
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	132	15400	
2-Butanone	132	8110	
Methyl Isobutyl Ketone	132	1610	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applie ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301803
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-103	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	12:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	134	21900	
2-Butanone	134	12700	
Methyl Isobutyl Ketone	134	2510	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301804
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-28	Dilution Factor:	136
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	13:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	136	6550	
2-Butanone	136	8720	
Methyl Isobutyl Ketone	136	638	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301804
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	VENT-28	Dilution Factor:	272
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	13:00	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BFT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	27	2180	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301805
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	VENT-38	Dilution Factor:	268
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	02:00	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BFT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	27	1260	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301806
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	vent 6	Dilution Factor:	268
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	02:30	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BFT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	27	1950	

J=Estimated value
U=Not detected at specified reporting limits

CH2M HILL

APPLIED SCIENCES LABORATORY

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

CH2M Hill Project # 920126.XX

Purchase Order #

Project Name: Orange County Landfill

Company Name/CH2M HILL Office: Ludwig Nodarse & Associates, Inc

Project Manager & Phone #: Mr. [X] David Tuckell 407-740-6110 (Ms. [ ] Dr. [ ])

Report Copy to:

Requested Completion Date: ASAP

Sampling Requirements: SDWA [ ] NPDES [ ] RCRA [ ] OTHER ____

Sample Disposal: Dispose [X] Return [ ]

OF CONTAINERS

LAB TEST CODES

ANALYSES REQUESTED

Sampling Date	Sampling Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	Matrix AIR	CLIENT SAMPLE ID (9 CHARACTERS)	# OF CONTAINERS	TO-14	TO-12	All TO-14 VOAtons except HAP & Acetone, MEK, MiBK	Alcohols						REMARKS	LAB 1 ID	LAB 2 ID
4/10	1100		X			X	VENT 37		X	X	X	X	X						-1	
4/10	1200		X			X	VENT 53		X	X	X	X	X						-2	
4/10	1230		X			X	VENT 103		X	X	X	X	X						-3	
4/10	100		X			X	VENT 28		X	X	X	X	X						-4	

LAB USE ONLY

Lab 1 # 3018

Lab 2 #

Quote #

Kit Request #

Project #

No. of Samples

Page of

Login

LIMS Ver

Sampled By & Title: David Tuckell Principal Scientist — Date/Time: 4/16/96 1100

Relinquished By (Please sign and print name): David Tuckell — Date/Time: 4-11-96

Received By (Please sign and print name): Bennett 4-15-96 16:30

Relinquished By (Please sign and print name): — Date/Time:

Received By (Please sign and print name): — Date/Time:

Relinquished By (Please sign and print name): — Date/Time:

Received By (Please sign and print name): — Date/Time:

Shipped Via: UPS BUS (Fed-Ex) Hand Other ____ — Shipping #:

Work Authorized By (Please sign and print name):

Remarks: contact: Ben

QC Level: 1 2 3 Other: ____

COC Rec | ICE

Ana Req | TEMP

Cust Seal | Ph

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB Yellow - LAB Pink - Client

Best Available Copy

CH2M HILL
APPLIED SCIENCES LABORATORY

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

CH2M Hill Project #	Purchase Order #
Project Name: Orange Cty. Landfill	
Company Name/CH2M HILL Office: L. V. Nodarse & Associates	
Project Manager & Phone #: Mr. [X] Ms. [ ] Dr. [ ] David Tweddell 714-740-6100	Report Copy to:
Requested Completion Date:	Sampling Requirements: SDWA [ ] NPDES [ ] RCRA [ ] OTHER [ ] — Sample Disposal: Dispose [X] Return [ ]

LAB TEST CODES

SHADED AREA-- FOR LAB USE ONLY

Lab 1 # 3018 | Lab 2 #

Quote # | Kit Request #

Project #

No. of Samples | Page of

Login | LIMS Ver

ITEM | REMARKS | LAB 1 ID | LAB 2 ID

ANALYSES REQUESTED

Sampling Date	Sampling Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	Matrix AIR	CLIENT SAMPLE ID (9 CHARACTERS)	# OF CONTAINERS	TO-14	TO-15	BTEX	All TO-14 options except HAP	Acetone, MEK, MIBK	Alcohols	LAB 1 ID	LAB 2 ID
4/10	200		X			X	VENT 38		X	X		X			5	
4/10	230		X			X	VENT 6		X	X		X			6	

Sample concentrations ... sample signs ...

Sampled By & Title: D. Tweddell (Please sign and print name): D. Tweddell	Date/Time: 4/10/96	Relinquished By (Please sign and print name): D. Tweddell David Tweddell	Date/Time: 4-11-96
Received By (Please sign and print name):	Date/Time:	Relinquished By (Please sign and print name):	Date/Time:
Received By (Please sign and print name):	Date/Time:	Relinquished By (Please sign and print name):	Date/Time:
Received By (Please sign and print name):	Date/Time:	Shipped Via: UPS BUS (Fed-Ex) Hand Other ____	Shipping #:
Work Authorized By (Please sign and print name):	Remarks:		

QC Level: 1 2 3 Other: ____

COC Rec | ICE

Ana Req | TEMP

Cust Seal | Ph

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB Yellow - LAB Pink - Client

Celebrating 50 Years

May 8, 1996

L.J. Nodarse & Associates
807 South Orlando Ave
Suite A
Winter Park, FL 32789

Dear David Twedell:

RE: Analytical Data for L.J. Nodarse & Associates
CVO Laboratory Reference No. 3071

On April 24, 1996, the CH2M HILL Corvallis Applied Sciences Laboratory received six samples with a request for analysis of selected parameters.

The analytical results and associated quality control data are enclosed. The TRS analyses were performed by Performance Analytical, Inc. and their report is attached.

The CH2M HILL Applied Sciences Laboratory appreciates your business and looks forward to serving your analytical needs again. If you should have any questions concerning the data, or if you need additional information, please call Ms. Kathy McKinley at (541) 758-0235, extension 3120.

Sincerely,

Kelly Ensor
Administrative Assistant

Enclosures

Applied Sciences Laboratory
Corvallis Office
2300 NW Walnut Blvd., Corvallis, OR 97330-3538
P. O. Box 428, Corvallis, OR 97339-0428
541 752-4271
Fax No. 541 752-0276

Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

PAGE 1 OF 1

Client : CH2M Hill

Client Sample ID : N/A
PAI Sample ID : PAI Method Blank

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : N/A
Date Received : N/A
Date Analyzed : 4/25/96
Volume(s) Analyzed : 10.0 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	ND	5.60	ND	4.00
463-58-1	Carbonyl Sulfide	ND	9.80	ND	4.00
74-93-1	Methyl Mercaptan	ND	7.90	ND	4.00
75-08-1	Ethyl Mercaptan	ND	10.0	ND	4.00
75-18-3	Dimethyl Sulfide	ND	10.0	ND	4.00
75-15-0	Carbon Disulfide	ND	6.20	ND	2.00
75-33-2	Isopropyl Mercaptan	ND	12.0	ND	4.00
75-66-1	tert-Butyl Mercaptan	ND	15.0	ND	4.00
107-03-9	n-Propyl Mercaptan	ND	12.0	ND	4.00
624-89-5	Ethyl Methyl Sulfide	ND	12.0	ND	4.00
110-02-1	Thiophene	ND	14.0	ND	4.00
513-44-0	Isobutyl Mercaptan	ND	15.0	ND	4.00
352-93-2	Diethyl Sulfide	ND	15.0	ND	4.00
109-79-5	n-Butyl Mercaptan	ND	15.0	ND	4.00
624-92-0	Dimethyl Disulfide	ND	7.70	ND	2.00
616-44-4	3-Methylthiophene	ND	16.0	ND	4.00
110-01-0	Tetrahydrothiophene	ND	14.0	ND	4.00
638-02-8	2,5-Dimethylthiophene	ND	18.0	ND	4.00
872-55-9	2-Ethylthiophene	ND	18.0	ND	4.00
110-81-6	Diethyl Disulfide	ND	10.0	ND	2.00
	Total Reduced Sulfur	ND	N/A	ND	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

20954 Osborne Street, Canoga Park, CA 91304 • Phone 818 709-1139 • Fax 818 709-2915

Corvallis Applie[illegible]ciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301805
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT-38	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:00	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	134	332	
2-Butanone	134	79	J
Methyl Isobutyl Ketone	134	134	U

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301806
Sampled By:	D. Twedell	Date Analyzed:	4/23/96
Client Sample ID:	VENT 6	Dilution Factor:	134
Sampling Date:	04/10/96	Analysis Method:	TO-14
Sampling Time:	02:30	Report Revision No.:	0
Type:	Grab	Reported By:	B. Thompson
Matrix:	Air	Reviewed By:	JB
		Units:	ppbv

Analyte	Reporting Limit	Sample Result	Qualifier
Acetone	134	13300	
2-Butanone	134	14600	
Methyl Isobutyl Ketone	134	1010	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301801
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	VENT-37	Dilution Factor:	270
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	11:00	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	27	1090	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301802
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	VENT-53	Dilution Factor:	264
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	12:00	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BFT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	26	564	

J=Estimated value
U=Not detected at specified reporting limits

Corvallis Applied Sciences Laboratory

Client Information		Lab Information	
Project Name:	L.J. Nodarse & Associates	Date Rec'd:	04/15/96
Project Manager:	David Twedell	Lab ID:	301803
Sampled By:	D. Twedell	Date Analyzed:	5/2/96
Client Sample ID:	VENT-103	Dilution Factor:	267
Sampling Date:	04/10/96	Analysis Method:	TO-12
Sampling Time:	12:30	Report Revision No.:	0
Type:	Grab	Reported By:	J. Bennett
Matrix:	Air	Reviewed By:	BFT
		Units:	ppmvC

Analyte	Reporting Limit	Sample Result	Qualifier
Total Non-Methane Organic Carbon	27	2700	

J=Estimated value
U=Not detected at specified reporting limits

Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

PAGE 1 OF 1

Client : CH2M Hill

Client Sample ID : OCNEW028
PAI Sample ID : P9600730-001

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.10 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	15,200	56.0	10,900	40.0
463-58-1	Carbonyl Sulfide	301	98.0	123	40.0
74-93-1	Methyl Mercaptan	8,220	79.0	4,180	40.0
75-08-1	Ethyl Mercaptan	429	100	169	40.0
75-18-3	Dimethyl Sulfide	2,660	100	1,050	40.0
75-15-0	Carbon Disulfide	303	62.0	97.4	20.0
75-33-2	Isopropyl Mercaptan	1,370	120	440	40.0
75-66-1	tert-Butyl Mercaptan	708	150	192	40.0
107-03-9	n-Propyl Mercaptan	379	120	122	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	1,380	140	400	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	ND	160	ND	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	31,000	N/A	17,700	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

20954 Osborne Street, Canoga Park, CA 91304 • Phone 818 709 1139 • Fax 818 709-2915

Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

Client : CH2M Hill

Client Sample ID : OCAK0037
PAI Sample ID : P9600730-002

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	51,400	56.0	36,900	40.0
463-58-1	Carbonyl Sulfide	ND	98.0	ND	40.0
74-93-1	Methyl Mercaptan	3,070	79.0	1,560	40.0
75-08-1	Ethyl Mercaptan	531	100	209	40.0
75-18-3	Dimethyl Sulfide	3,160	100	1,240	40.0
75-15-0	Carbon Disulfide	81.2	62.0	26.1	20.0
75-33-2	Isopropyl Mercaptan	1,000	120	322	40.0
75-66-1	tert-Butyl Mercaptan	ND	150	ND	40.0
107-03-9	n-Propyl Mercaptan	281	120	90.4	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	1,060	140	309	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	820	160	204	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	61,400	N/A	40,900	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

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Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

PAGE 1 OF 1

Client : CH2M Hill

Client Sample ID : OCNEW006
PAI Sample ID : P9600730-003

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	44,800	56.0	32,200	40.0
463-58-1	Carbonyl Sulfide	318	98.0	129	40.0
74-93-1	Methyl Mercaptan	5,250	79.0	2,670	40.0
75-08-1	Ethyl Mercaptan	432	100	170	40.0
75-18-3	Dimethyl Sulfide	2,900	100	1,140	40.0
75-15-0	Carbon Disulfide	105	62.0	33.6	20.0
75-33-2	Isopropyl Mercaptan	1,700	120	546	40.0
75-66-1	tert-Butyl Mercaptan	507	150	138	40.0
107-03-9	n-Propyl Mercaptan	289	120	92.7	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	1,640	140	478	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	277	160	69.1	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	58,200	N/A	37,700	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RC

Date : 5/7/96

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Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

Client : CH2M Hill

Client Sample ID : OCNEW038
PAI Sample ID : P9600730-004

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	17,900	56.0	12,900	40.0
463-58-1	Carbonyl Sulfide	181	98.0	73.6	40.0
74-93-1	Methyl Mercaptan	94.2	79.0	47.9	40.0
75-08-1	Ethyl Mercaptan	423	100	167	40.0
75-18-3	Dimethyl Sulfide	ND	100	ND	40.0
75-15-0	Carbon Disulfide	ND	62.0	ND	20.0
75-33-2	Isopropyl Mercaptan	856	120	275	40.0
75-66-1	tert-Butyl Mercaptan	407	150	111	40.0
107-03-9	n-Propyl Mercaptan	256	120	82.3	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	841	140	244	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	ND	160	ND	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	21,000	N/A	13,900	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

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Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

Client : CH2M Hill

Client Sample ID : OCNEW038
PAI Sample ID : P9600730-004 (Laboratory Duplicate)

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	18,200	56.0	13,000	40.0
463-58-1	Carbonyl Sulfide	194	98.0	78.9	40.0
74-93-1	Methyl Mercaptan	95.4	79.0	48.5	40.0
75-08-1	Ethyl Mercaptan	425	100	168	40.0
75-18-3	Dimethyl Sulfide	ND	100	ND	40.0
75-15-0	Carbon Disulfide	ND	62.0	ND	20.0
75-33-2	Isopropyl Mercaptan	878	120	282	40.0
75-66-1	tert-Butyl Mercaptan	409	150	111	40.0
107-03-9	n-Propyl Mercaptan	259	120	83.3	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	821	140	239	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	ND	160	ND	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	21,300	N/A	14,000	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

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Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

PAGE 1 OF 1

Client : CH2M Hill

Client Sample ID : OCAK0053
PAI Sample ID : P9600730-005

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)
0.0050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	70,700	56.0	50,700	40.0
463-58-1	Carbonyl Sulfide	266	98.0	109	40.0
74-93-1	Methyl Mercaptan	10,700	79.0	5,430	40.0
75-08-1	Ethyl Mercaptan	509	100	200	40.0
75-18-3	Dimethyl Sulfide	5,760	100	2,270	40.0
75-15-0	Carbon Disulfide	111	62.0	35.8	20.0
75-33-2	Isopropyl Mercaptan	2,080	120	667	40.0
75-66-1	tert-Butyl Mercaptan	287	150	77.9	40.0
107-03-9	n-Propyl Mercaptan	343	120	110	40.0
624-89-5	Ethyl Methyl Sulfide	ND	120	ND	40.0
110-02-1	Thiophene	1,510	140	438	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	ND	150	ND	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	875	160	218	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	93,100	N/A	60,300	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : RG

Date : 5/7/96

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Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS

PAGE 1 OF 1

Client : CH2M Hill

Client Sample ID : OCAK0103
PAI Sample ID : P9600730-006

Test Code : GC/FPD Reduced Sulfur Analysis
Analyst : Wade Henton
Instrument : HP5890A/FPD #4
Matrix : Tedlar Bag

Date Sampled : 4/22/96
Date Received : 4/25/96
Date Analyzed : 4/25/96
Volume(s) Analyzed : 1.0 (ml)
0.050 (ml)

CAS #	COMPOUND	RESULT ug/m3	REPORTING LIMIT ug/m3	RESULT ppb	REPORTING LIMIT ppb
7783-06-4	Hydrogen Sulfide	32,500	56.0	23,300	40.0
463-58-1	Carbonyl Sulfide	226	98.0	92.2	40.0
74-93-1	Methyl Mercaptan	12,800	79.0	6,490	40.0
75-08-1	Ethyl Mercaptan	416	100	164	40.0
75-18-3	Dimethyl Sulfide	32,000	100	12,600	40.0
75-15-0	Carbon Disulfide	ND	62.0	ND	20.0
75-33-2	Isopropyl Mercaptan	933	120	300	40.0
75-66-1	tert-Butyl Mercaptan	384	150	104	40.0
107-03-9	n-Propyl Mercaptan	262	120	84.0	40.0
624-89-5	Ethyl Methyl Sulfide	272	120	87.5	40.0
110-02-1	Thiophene	882	140	256	40.0
513-44-0	Isobutyl Mercaptan	ND	150	ND	40.0
352-93-2	Diethyl Sulfide	ND	150	ND	40.0
109-79-5	n-Butyl Mercaptan	265	150	71.9	40.0
624-92-0	Dimethyl Disulfide	ND	77.0	ND	20.0
616-44-4	3-Methylthiophene	321	160	79.9	40.0
110-01-0	Tetrahydrothiophene	ND	140	ND	40.0
638-02-8	2,5-Dimethylthiophene	ND	180	ND	40.0
872-55-9	2-Ethylthiophene	ND	180	ND	40.0
110-81-6	Diethyl Disulfide	ND	100	ND	20.0
	Total Reduced Sulfur	81,300	N/A	43,600	N/A

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : BG

Date : 5/7/96

Best Available Copy

CH2M HILL
APPLIED SCIENCES LABORATORY

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

CH2M Hill Project #: 3 112530.31
Purchase Order #: 22

Project Name: L.J. Nodarse

Company Name/CH2M HILL Office:

Project Manager & Phone #: Mr. [ ] Ms. [ ] Dr. [ ]

Report Copy to: Jeni Mattick

Requested Completion Date:

Sampling Requirements: SDWA ☐ NPDES ☐ RCRA ☐ OTHER ____

Sample Disposal: Dispose ☐ Return ☐

OF CONTAINERS

LAB TEST CODES

ANALYSES REQUESTED: TO15-20 compound (mtd llcm) #175/sp.

SHADED AREAS FOR LAB USE ONLY

Lab 1 #: [illegible] Lab 2 #: P9600730

Quote #: Kit Request #:

Project #:

No. of Samples: 6 Page 1 of 1

Login: LIMS Ver:

Date	Time	COMP	GRAB	WATER	SOIL	AIR	CLIENT SAMPLE ID (9 CHARACTERS)	# OF CONTAINERS	REMARKS	LAB 1 ID	LAB 2 ID
4/22	1600					X	OCNEW028	1	P9600730-001	1	
	1540					X	OCHK-0037	1	-002	2	
	1650					X	OCNEW006	1	-003	3	
	1700					X	OCNEW0038	1	-004	4	
	1610					X	OCAK0053	1	-005	5	
	1630					X	OCAK0103	1	-006	6	

Sampled By & Title (Please sign and print name)	Date/Time	Relinquished By (Please sign and print name)	Date/Time
Received By (Please sign and print name) Jeni Mattick	Date/Time 4-24-96 1250	Relinquished By (Please sign and print name) Jeni Mattick	Date/Time 4-24-96 1400
Received By (Please sign and print name) Robert DeLao ROBERT DELAO	Date/Time 4/25/96 9:30 am	Relinquished By (Please sign and print name)	Date/Time
Received By (Please sign and print name)	Date/Time	Shipped Via: UPS BUS Fed-Ex (circled) Hand Other ____	Shipping #
Work Authorized By (Please sign and print name)	Remarks		

QC Level: 1 2 3 Other: ____

COC Rec ICE
Ana Req TEMP
Cust Seal Ph

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client
REV 3/94 FORM 340

PERFORMANCE ID:818-709-1139 MAY 08 '96 11:14 No.007 P.10

SAMPLE RECEIPT EXCEPTION REPORT

CH2M HILL Applied Sciences Laboratory
Sample Receipt Exception Report

Sample Batch Number: 3071 **Client/Project** L.J. Nordaas

The following exceptions were noted:		
		Comments
	1. No custody seal as required by project	
X	2. No chain-of-custody provided	
X	3. Analysis, description, date of collection not provided	
	4. Samples broken or leaking on reciept	
	5. Temperature of samples inappropriate for analysis requested	
	6. Container inappropriate for analysis	
	7. Inadequate sample volume.	
	8. Preservation inappropriate for analysis	
	9. Samples received out of holding time for analysis requrested	
	10. Discrepancies between COC form and container labels.	
	11. Other.	

Corrective Actions Taken:

SCNEW023	4-22-96	1640	3071-1
OCAK0037	4-22-96	1540	-2
OCNEW006	4-22-96	1650	-3
OCNEW038		1700	-4
OCAK0053		1610	-5
OCAK0103		1630	-6

Notified:

	Client–no name	**By:** Matrix
	Lab Mgr/Supervisor	**Date:** 4-24-96
	LAQC	
K	Client Services	

	VENT CONDITION SURVEY RESULTS			
Vent Code	Vent Height	Vent Depth	Water Level	Comments on Vent Condition
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
	VENT CONDITION SURVEY RESULTS			
Vent Code	Vent Height	Vent Depth	Water Level	Comments on Vent Condition
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
OCAK0001	5.3	10.0	NONE	OK
OCAK0002	5.5	9.5	NONE	OK
OCAK0003	5.7	9.0	8.0	OK
OCAK0004	3.0	14.5	12.5	Vent at 5 deg. tilt to north. Vent on berm rd.
OCAK0005	5.0	12.5	NONE	OK
OCAK0006	6.5	22.0	21.0	OK
OCAK0007	6.7	13.0	12.5	Vent at 10 deg. tilt to east
OCAK0008	3.5	15.0	13.0	Vent at 7 deg. tilt to north
OCAK0009	4.9	14.5	13.0	OK
OCAK0010	5.7	18.0	15.0	OK
OCAK0011	5.6	20.0	16.0	OK
OCAK0012	5.3	31.0	NONE	OK
OCAK0013	5.1	30.5	29.0	OK
OCAK0014	6.1	9.0	NONE	OK
OCAK0015	2.3	13.0	NONE	Vent on berm rd.
OCAK0016	5.8	13.0	11.0	Vent at 5 deg. tilt to northeast
OCAK0017	5.7	32.0	27.0	Vent at 7 deg. tilt to north
OCAK0018	5.3	32.0	27.0	OK
OCAK0019	5.8	36.0	33.0	Vent at 10 deg. tilt to north
OCAK0020	5.7	23.0	18.0	Vent at 5 deg. tilt to north
OCAK0021	5.4	35.0	NONE	Vent at 15 deg. tilt to east
OCAK0022	4.8	13.0	12.0	Vent at 10 deg. tilt to east
OCAK0023	4.2	11.0	NONE	Vent at 5 deg. tilt to west
OCAK0024	5.4	15.0	12.0	Vent at 5 deg. tilt to northwest
OCAK0025	5.5	31.0	29.0	Vent at 12 deg. tilt to northwest
OCAK0026	4.6	28.0	NONE	Vent damaged at turndown , seperation in first bend
OCAK0027	4.5	45.0	27.0	OK
OCAK0028	5.6	48.0	31.0	Vent at 10 deg. tilt to northeast
OCAK0029	4.7	23.0	NONE	OK
OCAK0030	3.8	11.0	NONE	Vent at 5 deg. tilt to east

	VENT CONDITION SURVEY RESULTS			
Vent Code	**Vent Height**	**Vent Depth**	**Water Level**	**Comments on Vent Condition**
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
OCAK0031	5.2	8.0	NONE	OK
OCAK0032	5.8	31.0	28.0	OK
OCAK0033	5.9	36.0	30.0	OK
OCAK0034	4.9	45.0	25.0	Vent at 5 deg. tilt to west
OCAK0035	5.5	23.0	16.0	No flow from vent pipe
OCAK0036	5.5	29.0	NONE	OK
OCAK0037	5.0	22.0	20.0	Vent at 15 deg. tilt to northeast. Gas sample taken
OCAK0038	5.1	43.0	19.0	Vent at 10 deg. tilt to east
OCAK0039	2.3	16.0	13.0	Vent at 20 deg. tilt to east
OCAK0040	5.1	6.0	NONE	OK
OCAK0041	4.8	24.0	20.0	Vent at 7 deg. tilt to west
OCAK0042	5.3	36.0	29.0	OK
OCAK0043	5.7	36.0	35.0	OK
OCAK0044	5.0	48.0	36.0	Vent at 10 deg. tilt to northeast
OCAK0045	3.4	55.0	43.0	Vent at 15 deg. tilt to northeast, Vent foaming at tine of test
OCAK0046	3.6	50.0	46.0	OK
OCAK0047	4.2	41.0	37.0	Vent at 12 deg. tilt to east
OCAK0048	6.5	40.0	30.0	OK
OCAK0049	5.5	12.0	10.5	Vent at 7 deg. tilt to east
OCAK0050	4.5	10.5	NONE	OK
OCAK0051	2.0	28.0	25.0	Vent at 25 deg. tilt to southwest
OCAK0052	5.9	37.0	36.0	OK
OCAK0053	4.8	48.0	34.0	Vent at 10 deg. tilt to south . Gas sample taken
OCAK0054	6.0	49.0	38.0	Vent at 5 deg. tilt to south . Vent foaming at time of sample
OCAK0055	5.9	40.0	35.0	Vent at 15 deg. tilt to south
OCAK0056	5.7	43.0	NONE	Vent at 5 deg. tilt to southeast
OCAK0057	5.4	49.0	40.0	Vent at 7 deg. tilt to east
OCAK0058	5.1	46.0	42.0	Vent at 10 deg. tilt to east
OCAK0059	5.8	40.0	33.0	OK
OCAK0060	5.9	16.0	14.0	Vent at 7 deg. tilt to east

	VENT CONDITION SURVEY RESULTS			
Vent Code	**Vent Height**	**Vent Depth**	**Water Level**	**Comments on Vent Condition**
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
OCAK0061	Well does not exist			
OCAK0062	5.1	14.0	11.0	OK
OCAK0063	4.9	33.0	23.0	OK
OCAK0064	5.5	40.0	35.0	Vent at 5 deg. tilt to west
OCAK0065	5.0	47.0	29.0	Vent at 5 deg. tilt to east
OCAK0066	4.3	42.0	37.0	Vent at 15 deg. tilt to southwest
OCAK0067	3.9	26.0	NONE	Vent at 10 deg. tilt to northeast
OCAK0068	5.5	51.0	25.0	Vent at 15 deg. tilt to north east
OCAK0069	5.0	43.0	40.0	Vent at 17 deg. tilt to east
OCAK0070	6.2	44.0	41.0	Vent at 15 deg. tilt to east
OCAK0071	5.2	29.0	27.0	OK
OCAK0072	4.3	11.0	NONE	OK
OCAK0073	Well does not exist			
OCAK0074	5.8	7.0	NONE	OK
OCAK0075	5.0	21.0	20.0	OK
OCAK0076	5.0	36.0	30.0	Vent at 5 deg. tilt to southwest
OCAK0077	5.1	33.0	31.0	Vent at 20 deg. tilt to southwest
OCAK0078	4.0	47.0	33.0	Vent at 8 deg. tilt to southeast
OCAK0079	5.1	51.0	22.0	Vent at 5 deg. tilt to north
OCAK0080	5.1	51.0	29.0	Vent at 12 deg. tilt to east
OCAK0081	4.4	48.0	40.5	Vent at 18 deg. tilt to east
OCAK0082	5.1	20.0	NONE	Vent at 22 deg. tilt to east
OCAK0083	5.6	35.0	33.0	OK
OCAK0084	4.0	8.0	NONE	OK
OCAK0085	6.3	6.0	NONE	Vent at 5 deg. tilt to east
OCAK0086	5.7	9.0	NONE	OK
OCAK0087	4.3	25.0	22.0	OK
OCAK0088	5.6	34.0	NONE	Vent at 10 deg. tilt to southwest
OCAK0089	4.6	42.0	39.0	Vent at 12 deg. tilt to southwest
OCAK0090	4.2	45.0	37.0	OK

	VENT CONDITION SURVEY RESULTS			
Vent Code	**Vent Height**	**Vent Depth**	**Water Level**	**Comments on Vent Condition**
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
OCAK0091	5.9	33.0	30.0	OK
OCAK0092	3.8	48.0	43.0	OK
OCAK0093	4.7	48.0	41.0	OK
OCAK0094	5.5	41.0	34.0	Vent at 5 deg. tilt to south
OCAK0095	2.9	23.0	NONE	Vent at 7 deg. tilt to east
OCAK0096	5.3	10.0	NONE	Vent at 5 deg. tilt to east
OCAK0097	5.8	8.5	NONE	OK
OCAK0098	4.1	8.0	NONE	OK
OCAK0099	5.8	21.0	NONE	Vent at 7 deg. tilt to southwest
OCAK0100	5.1	28.0	24.0	OK
OCAK0101	4.1	44.0	40.0	Vent at 10 deg. tilt to southeast
OCAK0102	2.5	52.0	40.0	Vent at 20 deg. tilt to south
OCAK0103	3.9	21.0	13.0	Vent at 10 deg. tilt to southeast
OCAK0104	4.9	44.0	21.0	Vent at 10 deg. tilt to southeast
OCAK0105	6.0	33.0	23.0	OK
OCAK0106	4.2	10.0	NONE	OK
OCAK0107	4.3	10.5	10.0	OK
OCAK0108	5.8	10.0	NONE	OK
OCAK0109	5.5	21.0	18.0	Vent at 10 deg. tilt to south
OCAK0110	5.1	29.0	21.0	Vent at 5 deg. tilt to southwest
OCAK0111	4.4	41.0	NONE	Vent at 10 deg. tilt to southeast. Damaged at 1.0 (ALS) hole taped up for test
OCAK0112	5.1	16.5	NONE	OK
OCAK0113	5.5	39.0	NONE	Vent at 10 deg. tilt to southeast
OCAK0114	6.6	19.0	NONE	OK
OCAK0115	6.3	11.0	NONE	OK
OCAK0116	4.9	9.0	NONE	Vent at 7 deg. tilt to south
OCAK0117	5.7	21.5	20.0	Vent at 7 deg. tilt to south
OCAK0118	5.1	23.0	22.0	OK
OCAK0119	3.5	31.0	21.0	Vent at 15 deg. tilt to southeast
OCAK0120	5.4	9.0	NONE	Vent at 5 deg. tilt to south

	VENT CONDITION SURVEY RESULTS			
Vent Code	**Vent Height**	**Vent Depth**	**Water Level**	**Comments on Vent Condition**
	(ft. ALS)	(ft. BLS)	(ft. BLS)	
OCAK0121	5.9	9.0	NONE	OK
OCAK0122	3.5	8.5	NONE	OK
OCAK0123	4.8	9.0	NONE	Vent at 5 deg. tilt to southeast
OCAK0124	4.7	13.0	NONE	Vent at 5 deg. tilt to east
OCAK0125	6.0	11.0	NONE	OK
OCNEW006	5.3	18.0	17.0	Gas sample taken
OCNEW028	4.2	17.5	16.0	Gas sample taken
OCNEW038	4.0	13.0	10.0	Gas sample taken

	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
OCAK0001	58.9	38.1	0.0	3.0	82	0.2	0	0	84	30.00	61
OCAK0002	58.0	38.6	0.0	3.4	80	0.3	0	0	85	30.00	61
OCAK0003	58.7	38.6	0.2	2.5	86	0.6	1	35	86	30.00	65
OCAK0004	59.6	36.9	0.0	3.5	80	0.9	0	0	87	30.00	53
OCAK0005	58.3	38.7	0.0	3.0	80	0.5	11	389	86	30.00	57
OCAK0006	58.8	37.0	0.0	4.2	83	0.5	5	178	85	30.00	60
OCAK0007	59.3	36.2	0.0	4.5	84	0.9	0	0	85	30.00	67
OCAK0008	58.2	37.1	0.0	4.7	80	1.4	2	70	89	30.00	47
OCAK0009	58.6	37.6	0.0	3.8	82	1.5	1	35	88	30.00	48
OCAK0010	63.5	34.5	0.0	2.0	83	1.0	0	0	87	30.00	51
OCAK0011	62.6	34.1	0.0	3.3	82	0.6	0	0	86	30.00	55
OCAK0012	60.5	38.5	0.0	1.0	101	1.8	15	550	90	29.88	47
OCAK0013	66.4	33.6	0.0	0.0	96	2.2	19	765	73	30.10	25
OCAK0014	60.0	36.1	0.0	3.9	82	0.9	0	0	84	30.00	68
OCAK0015	55.8	38.7	0.0	5.5	80	5.0	0	0	87	30.00	51
OCAK0016	56.8	38.6	0.0	4.6	84	3.0	3	103	90	30.00	47
OCAK0017	61.8	38.2	0.0	0.0	101	1.7	15	562	86	29.84	38
OCAK0018	60.7	38.9	0.0	0.4	105	1.2	13	479	90	29.85	39
OCAK0019	60.4	37.9	0.0	1.7	108	2.4	19	696	91	29.85	43
OCAK0020	61.1	38.0	0.0	0.9	105	4.6	2	74	89	29.85	45
OCAK0021	63.6	36.4	0.0	0.0	100	2.9	15	579	68	30.35	36
OCAK0022	58.9	36.1	0.0	5.0	81	1.8	1	35	84	30.00	69
OCAK0023	57.1	38.9	0.0	4.0	82	5.0	1	34	90	30.00	50
OCAK0024	57.0	38.9	0.0	4.1	82	1.8	4	138	90	30.00	47
OCAK0025	60.4	38.9	0.0	0.7	101	2.7	14	513	91	29.80	35
OCAK0026	60.1	38.5	0.0	1.4	98	3.0	2	72	90	29.83	37
OCAK0027	61.8	37.9	0.0	0.3	93	7.2	1	37	92	29.83	41
OCAK0028	61.6	37.9	0.0	0.5	112	7.4	8	299	86.7	29.87	49
OCAK0029	60.4	39.6	0.0	0.0	119	5.7	32	1173	83	30.00	43
OCAK0030	58.5	37.2	0.0	4.3	80	2.2	0	0	83	30.00	70

	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
OCAK0031	56.8	39.3	0.0	3.9	82	5.9	0	0	90	30.00	48
OCAK0032	61.6	37.5	0.0	0.9	94	1.8	16	598	92	29.78	32
OCAK0033	60.4	38.8	0.0	0.8	109	2.4	20	733	91	29.78	33
OCAK0034	65.8	34.2	0.0	0.0	106	7.6	22	878	88	29.88	48
OCAK0035	1.7	0.1	18.3	79.9	88	0.0	0	0	87	29.88	48
OCAK0036	60.3	39.0	0.0	0.7	111	10.2	2	219	86	29.86	46
OCAK0037	64.8	35.2	0.0	0.0	122	5.0	36	1416	66	30.15	33
OCAK0038	62.7	37.1	0.2	0.0	111	5.2	41	1560	86	30.00	41
OCAK0039	52.3	28.7	2.3	16.7	85	1.0	0	0	83	29.98	72
OCAK0040	14.7	10.2	13.4	61.7	88	0.9	0	0	88	30.00	49
OCAK0041	57.6	38.8	0.2	3.4	85	1.9	10	349	89	30.00	52
OCAK0042	61.5	37.2	0.0	1.3	110	4.4	1	37	92	29.77	31
OCAK0043	60.7	39.3	0.0	0.0	123	7.6	26	958	85	29.90	44
OCAK0044	61.8	38.2	0.0	0.0	109	7.8	7	262	86	29.90	40
OCAK0045	61.4	38.2	0.0	0.4	115	5.7	7	260	87	29.90	38
OCAK0046	59.4	39.3	0.0	1.3	128	6.6	25	901	87	29.90	38
OCAK0047	59.8	38.9	0.0	1.3	119	3.7	12	435	89	29.90	33
OCAK0048	62.7	37.3	0.0	0.0	110	5.0	50	1903	82	30.00	46
OCAK0049	61.4	32.8	0.0	5.8	82	1.7	0	0	84	29.94	71
OCAK0050	56.8	39.5	0.1	3.6	88	0.3	0	0	89	30.00	48
OCAK0051	58.4	38.9	0.0	2.7	86	2.1	17	602	89	30.00	48
OCAK0052	61.9	38.1	0.0	0.0	103	2.9	24	902	92	29.78	31
OCAK0053	61.8	38.2	0.0	0.0	125	5.1	20	750	66	30.18	33
OCAK0054	61.3	38.4	0.0	0.3	120	6.2	9	334	86	30.00	44
OCAK0055	59.5	38.8	0.0	1.7	121	4.2	28	1011	87	30.00	40
OCAK0056	59.3	39.0	0.0	1.7	120	3.9	26	936	87	29.93	39
OCAK0057	60.3	38.5	0.0	1.2	121	4.0	9	329	88	29.92	37
OCAK0058	61.1	38.9	0.0	0.0	119	4.0	14	519	88	29.92	37
OCAK0059	61.5	38.2	0.3	0.0	104	4.2	45	1680	77	30.00	65
OCAK0060	58.9	36.9	0.0	4.2	82	1.4	1	35	84	29.95	68

	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
OCAK0061	Well does not exist in field										
OCAK0062	61.6	33.5	0.2	4.7	90	1.3	0	0	89	30.00	47
OCAK0063	64.1	34.3	0.0	1.6	93	1.6	3	116	93	29.78	30
OCAK0064	60.7	38.3	0.0	1.0	114	2.4	21	773	93	29.78	29
OCAK0065	61.3	38.7	0.0	0.0	119	3.0	21	781	79	29.90	40
OCAK0066	61.9	38.1	0.0	0.0	120	3.5	49	1841	79	29.90	40
OCAK0067	61.5	38.5	0.0	0.0	108	2.2	13	485	80	29.90	39
OCAK0068	63.2	36.8	0.0	0.0	114	2.6	44	1688	78	29.90	42
OCAK0069	62.6	37.4	0.0	0.0	121	3.8	38	1444	76	29.90	42
OCAK0070	69.1	30.9	0.0	0.0	114	4.5	51	2139	76	29.90	46
OCAK0071	67.2	32.8	0.0	0.0	94	1.3	19	765	72	30.32	31
OCAK0072	58.0	37.3	0.0	4.7	77	1.3	8	281	84	29.95	66
OCAK0073	Well does not exist in field										
OCAK0074	0.2	0.2	18.4	81.2	94	0.0	0	0	91	30.00	42
OCAK0075	59.0	36.1	0.2	4.7	87	1.8	10	358	90	30.00	46
OCAK0076	60.2	39.0	0.0	0.8	104	2.3	22	804	90	29.75	31
OCAK0077	60.5	39.5	0.0	0.0	112	2.4	19	697	90	29.76	30
OCAK0078	65.1	34.9	0.0	0.0	110	1.6	26	1027	80	29.90	40
OCAK0079	62.2	37.8	0.0	0.0	123	3.0	23	868	76	29.90	40
OCAK0080	62.1	37.9	0.0	0.0	104	1.4	34	1281	84	30.00	43
OCAK0081	61.0	39.0	0.0	0.0	112	1.9	13	481	82	30.00	42
OCAK0082	61.7	38.2	0.1	0.0	119	3.1	34	1273	86	30.00	41
OCAK0083	64.1	35.9	0.0	0.0	106	1.5	14	544	73	30.30	29
OCAK0084	36.2	22.6	6.4	34.8	84	0.0	0	0	83	29.96	67
OCAK0085	56.3	35.1	1.2	7.4	93	0.0	0	0	91	30.00	41
OCAK0086	59.2	37.1	0.2	3.5	90	1.2	0	0	92	30.00	50
OCAK0087	58.5	38.9	0.1	2.5	88	3.0	3	106	91	30.00	49
OCAK0088	63.8	36.2	0.0	0.0	100	2.2	18	697	80	30.18	40
OCAK0089	63.4	36.6	0.0	0.0	114	2.2	15	577	79	30.18	38
OCAK0090	63.3	36.7	0.0	0.0	112	1.9	20	768	80	30.06	52

	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
OCAK0091	65.1	34.9	0.0	0.0	111	1.0	14	553	81	30.08	54
OCAK0092	60.8	39.2	0.0	0.0	128	2.7	25	922	79	30.08	63
OCAK0093	62.2	37.8	0.0	0.0	119	2.2	7	264	78	30.08	69
OCAK0094	60.9	39.1	0.0	0.0	104	1.4	16	591	76	30.28	29
OCAK0095	59.5	38.1	0.0	2.4	86	1.4	11	397	83	29.94	68
OCAK0096	57.0	37.8	0.0	5.2	79	1.5	8	276	83	29.95	66
OCAK0097	59.3	38.8	0.1	1.8	88	1.8	3	108	94	30.00	42
OCAK0098	59.8	37.4	0.2	2.6	100	3.9	0	0	96	30.00	41
OCAK0099	58.6	36.7	0.1	4.6	90	1.4	12	426	95	30.00	41
OCAK0100	63.1	36.9	0.0	0.0	96	1.6	14	536	78	30.20	39
OCAK0101	65.5	34.5	0.0	0.0	116	3.3	28	1113	76	30.22	42
OCAK0102	65.4	34.6	0.0	0.0	110	1.2	7	277	86	30.05	49
OCAK0103	62.9	37.1	0.0	0.0	119	1.5	13	496	67	30.17	32
OCAK0104	62.5	37.5	0.0	0.0	119	1.8	17	645	78	30.25	29
OCAK0105	61.4	38.6	0.0	0.0	110	2.8	9	335	78	30.27	29
OCAK0106	59.3	37.7	0.0	3.0	77	1.8	0	0	79	30.00	75
OCAK0107	60.1	37.4	0.1	2.4	94	1.2	0	0	96	30.00	42
OCAK0108	60.0	36.9	0.1	3.0	87	0.8	3	109	93	30.00	43
OCAK0109	57.9	39.1	0.1	2.9	90	1.8	3	105	93	30.00	51
OCAK0110	63.3	36.7	0.0	0.0	100	1.2	7	269	74	30.28	44
OCAK0111	64.5	35.5	0.0	0.0	105	1.4	23	900	73	30.28	44
OCAK0112	64.4	35.6	0.0	0.0	114	1.0	14	547	71	30.30	46
OCAK0113	62.9	37.1	0.0	0.0	114	1.0	14	534	75	30.25	29
OCAK0114	58.6	38.1	0.0	3.3	84	2.6	14	498	78	30.00	78
OCAK0115	64.3	32.2	0.1	3.4	95	0.7	0	0	94	30.00	46
OCAK0116	59.3	37.8	0.0	2.9	87	1.2	0	0	92	30.00	47
OCAK0117	58.4	38.2	0.1	3.3	90	1.0	15	531	91	30.00	51
OCAK0118	57.3	40.1	0.1	2.5	98	1.2	15	521	92	30.00	51
OCAK0119	64.9	35.1	0.0	0.0	89	0.7	1	39	71	30.30	54
OCAK0120	60.6	34.8	0.1	4.5	85	0.8	0	0	90	30.00	48

	FIELD GAS VENT ANALYTICAL RESULTS										
Vent Code	**CH4**	**CO2**	**O2**	**Bal**	**Temp.**	**Press.**	**Velocity**	**BTU**	**Air Temp.**	**Bar. Press.**	**Rel. Humidity**
	(% by vol.)				(deg F)	(in. H20)	(scfm)	(per/hr)	(deg F)	(mB)	(%)
OCAK0121	60.8	36.4	0.1	2.7	86	0.6	6	221	91	30.00	48
OCAK0122	29.9	19.1	8.8	42.2	94	1.3	0	0	93	30.00	50
OCAK0123	57.9	39.2	0.0	2.9	83	2.8	4	140	91	30.00	53
OCAK0124	57.2	39.8	0.0	3.0	84	3.2	4	138	92	30.00	49
OCAK0125	57.7	37.9	0.0	4.4	88	1.8	0	0	91	30.00	52
OCNEW006	63.9	36.1	0.0	0.0	94	9.0	43	1668	71	30.18	31
OCNEW028	66.2	33.8	0.0	0.0	85	12.4	58	2331	71	30.17	31
OCNEW038	64.8	35.2	0.0	0.0	81	21.0	55	2163	71	30.17	32
OCAK0037	24 hr. stabalized pressure					13.8				30	
OCAK0066	24 hr. stabalized pressure					4.3				30.05	
OCAK0093	24 hr. stabalized pressure					2.9				30.05	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 50 National Primary and Secondary Ambient Air Quality Standards		F		No				Applies to airsheds.
40 CFR Part 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans		F		Yes	Has not been triggered	Has not been triggered		40 CFR 51.166 (b) (23) (I) establishes an NMOC emission standard of 45 megatons per year.
40 CFR Part 52 Approval and Promulgation of Implementation Plans (PSD)		F		Yes				40 CFR 52.23 (b) (23) (I) establishes standard of 45 megatons per year.
40 CFR Part 53 Ambient Air Monitoring Reference and Equivalent Methods		F		No				Not applicable to sources.
40 CFR Part 54 Prior Notice of Citizen Suits Under the Clean Air Act		F		No				Administative and procedural requirement.
40 CFR Part 55 Outer Continental Shelf Air Regulations		F		No				This facility is not an OCS source.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 56 Regional Consistency Under the Clean Air Act		F		No				Administrative and procedural.
40 CFR Part 57 Primary Nonferrous Smelter Orders		F		No				Not in this source category.
40 CFR Part 58 Ambient Air Quality Surveillance Regulations		F		No				Applies to airsheds and jurisdictions.
40 CFR Part 60 Subpart A NSPS General Provisions		F		Yes	40 CFR 60.752, 753, and 755.	40 CFR 60.754 and 756.		NSPS applicable to municipal solid waste landfills adopted March 12, 1996.
40 CFR Part 60 Subpart C Emission Guidelines and Compliance Times for Municipal Waste Combustors		F		No				Facility does not operate any municipal waste combustors.
40 CFR Part 60 Subpart E Standards of Performance for Municipal Waste Combustors		F		No				Facility does not operate any municipal waste combustors.
40 CFR Part 61 Subpart A NESHAPS	Requirements for all NESHAPS sources	F	Facility	Yes	See Subpart M.	See Subpart M.	In	Facility accepts asbestos-containing waste material. FDEP has NESHAPS authority and manages asbestos program.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable*	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.140 Applicability	Subpart applicable to sources listed, including waste disposal sites.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes n specific requirements.
40 CFR Part 61.141 Definitions	Subpart definitions.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes no specific requirements.
40 CFR Part 61.142 Standard for Asbestos Mills	Asbestos mill standards	F		No				This facility is not in the source category.
40 CFR Part 61.143 Standard for Roadways	Roadway standards	F		No				Facility does not use asbestos-containing materials (ACMs) for roadway construction or maintenance.
40 CFR Part 61.144 Standard for Manufacturing	Manufacturing standards	F		No				This facility is not in the source category.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.145 Standard for Demolition and Renovation	Demolition and renovation standards for structures with asbestos-containing materials (ACMs). An asbestos survey is required prior to activities.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a requirement that applies when, and if, triggered by facility activity. Requirements apply if demolition or renovation occurs.
40 CFR Part 61.146 Standard for Spraying	ACM spraying standards	F		No				This facility is not in the source category.
40 CFR Part 61.147 Standard for Fabricating	Standards for fabrication operations using commercial asbestos.	F		No				This facility is not in the source category.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[1]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.148 Standard for Insulating Materials	No installation of insulation containing friable ACMs.	F	Facility	Yes	None.	None.	In	Facility does not use and will not use friable ACMs for insulation.
40 CFR Part 61.149 Standard for Waste Disposal for Asbestos Mills	Asbestos mill waste disposal standards.	F		No				This facility is not in the source category.
40 CFR Part 61.150 Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations.	Waste disposal standards.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a procedural requirement that applies when, and if, triggered by facility activity. Applies if ACMs present in demolition or renovation operations at the facility. Final cover for entire landfill facility, including asbestos disposal areas, will meet requirements.
40 CFR Part 61.151 Standard for Inactive Waste Disposal for Asbestos Mills and Manufacturing and Fabricating Operations.	Standards for inactive disposal facility, including final cover requirements.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	Applicable as referenced by 40 CFR 61.154 (g) upon closure of the landfill.
40 CFR Part 61.152 Air-Cleaning		F		No				This facility is not in the source category.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.153 Reporting	Reporting requirements for new sources except for 61.143, 61.145, 61.146, 61.148.	F		No				This facility is not in the source category.
40 CFR Part 61.154 Standard for Active Waste Disposal Sites 61.154 (a), (c), (d)	Facility must have (a) no visible emissions, (c) meet daily cover requirements, or (d) use alternative emissions control approved by Agency.	F	Landfill	Yes	Daily cover of at least 6 inches of compacted nonasbestos-containing material is provided	Facility will maintain operations log of asbestos deposits and cover actions.	In	FDEP has authority for asbestos program, except for approval of alternative emissions control [40 CFR 61.154 (d)]; EPA maintains authority. Facility performs visual monitoring during disposal operations.
61.154 (b)	Fencing and warning sign requirements.	F	Landfill	Yes	Fencing around landfill property. Warning signs posted at active ACM disposal areas.	Fencing around landfill property. Warning signs posted at active ACM disposal areas.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.154 Standard for Active Waste Disposal Sites 61.154 (e), (f)	Recordkeeping requirements.	F	Facility	Yes	Waste shipment records kept in accordance with (e), (f) at OCSWMF.	Waste shipment records kept in accordance with (e), (f) at OCSWMF.	In	
61.154 (g), (h)	Closure requirements.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a procedural requirement that applies upon closure, at which time the indicated information will be provided to EPA.
61.154 (j)	Notification requirements for disturbing covered ACM waste disposal site.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	Applicable if triggered; disturbing covered ACM waste disposal site not expected in the foreseeable future.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.155 Standard for Operations that Convert ACM Waste into Asbestos-Free Material		F		No				This facility is not in the source category.
40 CFR Part 61.156 Cross-Reference to Other Asbestos Regulations	Provides reference to other asbestos regulatory programs.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes no specific requirements.
40 CFR Part 61.157 Delegation of Authority	Delegation of implementation s and enforcement authority.	F		No				This rule applies only to agencies. FDEP has authority except for sections specified that remain under federal authority.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable*	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 62 State Plans for Designated Facilities and Pollutants		F		No				Administrative and jurisdictional.
40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories		F		No				Not any of the listed source categories; general provisions not applicable until source subject to a standard.
40 CFR Part 65 Delayed Compliance Orders Under the Clean Air Act		F		No				Administrative and jurisdictional.
40 CFR Part 66 Assessment and Collection of Noncompliance		F		No				Administrative and jurisdictional.
40 CFR Part 67 Federal Approval of State Noncompliance Penalty Programs		F		No				Administrative and jurisdictional.
40 CFR Part 69 Special Exemptions from Requirements of the Clean Air Act		F		No				This facility is not in the source category.
40 CFR Part 70 State Operating Permit Programs		F	Facility	Yes	This permit application demonstrates compliance.	Facility will retain copy of permit at landfill and will renew permit after 5 years.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 72 Permits (Title IV, Acid Rain)		F		No				Administrative and jurisdictional; not in this source category.
40 CFR Part 73 Sulfur Dioxide Allowance System (Title IV)		F		No				This facility is not in the source category.
40 CFR Part 75 Continuous Emissions Monitoring (Title IV)		F		No				This facility is not in the source category.
40 CFR Part 77 Excess Emissions (Title IV)		F		No				This facility is not in the source category.
40 CFR Part 78 Appeals Procedures for Acid Rain		F		No				Administrative and jurisdictional; not in this source category.
40 CFR Part 79 Registration of Fuels and Fuel Additives		F		No				This facility is not in the source category.
40 CFR Part 80 Regulation of Fuels and Fuel Additives		F		No				This facility is not in the source category.
40 CFR Part 81 Designating Areas for Air Quality Planning		F		No				Administrative and jurisdictional.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 - PROTECTION OF STRATOSPHERIC OZONE

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 82 Subpart A Production and Consumption Controls		F		No				Landfill does not sell or distribute chlorofluorocarbons.
40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS								
40 CFR 82.30	Purpose and scope; applicability of rule.	F	Facility	Yes	None.	None.	In	Preamble to rule; no specific requirements imposed.
40 CFR 82.32	Definitions.	F	Facility	Yes	None.	None.	In	This section provides information, but imposes no specific requirements.
40 CFR 82.34 (a)	No person may perform service on a motor vehicle air conditioner involving refrigerant without approved equipment and proper training and certification.	F	Shop	Yes	Shop technicians are certified and equipment is approved.	Landfill will maintain personnel certifications and equipment approvals.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.34 (b)	May not sell or distribute Class I or Class II substance that is suitable for use as a refrigerant.	F		No				Facility does not sell or distribute these materials.
40 CFR 82.34 (c)	Technician training program must comply with standards.	F		No				Facility does not train technicians.
40 CFR 82.36 (a), (b)	Refrigerant recycling/ recovery equipment must be certified and meet standards set forth in Appendix A of this subpart.	F	Shop	Yes	Equipment has been certified and meets standards.	Landfill will maintain equipment certifications.	In	
40 CFR 82.36 (c)	Administrator will maintain a list of approved equipment.	F		No				Applies only to agencies.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.38	Approved independent standards testing organization.	F		No				Not in this source category
40 CFR 82.40	Technician training and certification program requirements.	F		No				Facility does not offer these training and certification programs.
40 CFR 82.42 (a)	No later than 1/1/93, any person repairing or servicing motor vehicle air conditioners shall certify to the Administrator that such person has acquired training and is properly using approved equipment.	F	Shop	Yes	A letter containing certification has been submitted to the EPA.	None.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.42 (b)	Record keeping: Records of names and addresses of any facility where refrigerant is sent, records demonstrating persons authorized to operate equipment are currently certified, must be kept on site 3 years.	F	Facility	Yes	Facility contracts with service that accepts refrigerant for recycling; invoices from recycler retained. Certificates for workers retained.	Facility will continue to retain records.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.42 (c)	Public notification requirements for retail sales of Class I or II substances useable as refrigerant.	F		No				Facility does not sell these substances.
40 CFR 82, Appendix A, Subpart B	Service guidelines for technicians when repairing vehicles and operating equipment.	F	Shop	Yes	Technicians are trained and certified in proper handling procedures.	Facility will maintain current training and certification of its technicians.	In	

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 82 - Subpart C Ban on Nonessential Products Containing Class I Substances		F		No				Landfill does not sell or distribute chlorofluorocarbons.
40 CFR Part 82 - Subpart D Federal Procurement		F		No				Applies to federal agencies.
40 CFR Part 82 - Subpart E Labeling of Products using Ozone Depleting Substances		F		No				Landfill does not sell or distribute chlorofluorocarbons.
40 CFR Part 82 - Subpart F Recycling and Emission Reduction		F		No				No maintenance or repair of appliances is performed.
40 CFR Part 85 Control of Air Pollution from Motor Vehicles and Motor Vehicles Engines		F		No				Landfill equipment exempt from testing; facility voluntarily tests its own vehicles.
40 CFR Part 86 Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines; Certification and Test Procedures		F		No				Not in this source category; applies to manufacturers.
40 CFR Part 87 Control of Air Pollution from Aircraft and Aircraft Engines		F		No				Not in this source category.
40 CFR Part 88 Clean-Fuel Vehicles		F		No				Not in this source category.

[a] "F" indicates federally enforceable requirement.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 258.23		F	Landfill	Yes				Established criteria for migration of explosive gases.
40 CFR Part 258.24		F	Landfill	Yes				Specifies air criteria for municipal solid waste landfills.

[a] "F" indicates federally enforceable requirement.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-4, F.A.C.: PERMITS	
Chapter Number (F.A.C.)	**Description**
62-4.030	General Prohibition.
62-4.040	Exemptions.
62-4.050	Procedure to Obtain Permits; Application.
62-4.060	Consultation.
62-4.070	Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080	Modification of Permit Conditions.
62-4.090	Renewals.
62-4.100	Suspension and Revocation.
62-4.110	Financial Responsibility.
62-4.120	Transfer of Permits.
62-4.130	Plant Operation - Problems.
62-4.150	Review.
62-4.160	Permit Conditions.
62-4.210	Construction Permits.
62-4.210	Operation Permit for New Sources.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-103, F.A.C.: RULES OF ADMINISTRATIVE PROCEDURE	
Chapter Number (F.A.C.)	**Description**
62-103.150	Public Notice of Application and Proposed Agency Action.
62-103.155	Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS	
Chapter Number (F.A.C.)	**Description**
62-210.300	Permits Required.
62-210.300 (1)	Air Construction Permits.
62-210.300 (2)	Air Operation Permits.
62-210.300 (3)	Exemptions.
62-210.300 (3) (a)	Full Exemptions.
62-210.300 (3) (b)	Temporay Exemptions.
62-210.300 (3) (c)	Record Keeping.
62-210.300 (5)	Notification of Startup.
62-210.300 (6)	Emissions Unit Reclassification.
62-210.350	Public Notice and Comment.
62-210.350 (3)	Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
62-210.360	Administrative Permit Corrections.
62-210.370 (3)	Annual Operating Report for Air Pollutant Emitting Facility.
62-210.650	Circumvention.
62-210.900	Forms and Instructions.
62-210.900 (1)	Application for Air Permit - Long Form, Form Instructions.
62-210.900 (5)	Annual Operationg Report for Air Pollutant Emitting Facility, Form and Instructions.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION	
Chapter Number (F.A.C.)	**Description**
62-213.205	Annual Emissions Fee.
62-213.300 (3) (k)	Record Keeping and Reporting Requirements.
62-213.400	Permits and Permit Revisions Required.
62-213.410	Changes Without Permit Revision.
62-213.412	Immediate Implementation Pending Revision Process.
62-213.420	Permit Applications.
62-213.430	Permit Issuance, Renewal, and Revision.
62-213.440	Permit Content.
62-213.460	Permit Shield.
62-213.900	Forms and Instructions
62-213.900 (1)	Major Air Pollution Source Annual Emissions Fee Form, Form and Instructions.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-252, F.A.C.: GASOLINE VAPOR CONTROL	
Chapter Number (F.A.C.)	**Description**
62-252.300	Gasoline Dispensing Facilities - Stage I.
62-252.300 (3) (a) (2)	Control Technical Requirement.
62-252.300 (4)	Compliance Schedule.
62-252.300 (6)	Record Keeping.

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY
CHAPTER 62-256, F.A.C.: OPEN BURNING AND FROST PROTECTION FIRES.
CHAPTER 62-257, F.A.C.: ASBESTOS NOTIFICATION AND FEE.
CHAPTER 62-281, F.A.C.: MOTOR VEHICLE AIR CONDITIONING REFRIGERANT RECOVERY AND RECYCLING.

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS	
Chapter Number (F.A.C.)	**Description**
62-296.310 (1) (a)	General Particulate Emission Limiting Standards: Applicability.
62-296.320 (2)	Objectionable Odor Prohibited.
62-296.320 (3)	Industrial, Commercial, and Municipal Open Burning Prohibited.
62-296.320 (4)	Unconfined Emissions of Particulate Matter.

Exhibit E

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSION MONITORING	
Chapter Number (F.A.C.)	**Description**
62-297.310	General Compliance Test Requirements.
62-297.340	Frequency of Compliance Test.
62-297.450 (4)	Record Keeping & Reporting.

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-700, F.A.C.: SOLID WASTE MANAGEMENT	
Chapter Number (F.A.C.)	**Description**
62-701.400 (10)	Construction Requirement for Landfill Gas Control Systems.
62-701.400 (11)	Construction Requirements for Landfill Gas Recovery Facilities.

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-709, F.A.C.: CRITERIA FOR PRODUCTION AND USE OF COMPOST	
Chapter Number (F.A.C.)	**Description**
62-709.400 (1)	Prohibition of Air Pollutant Discharge Resulting in Objectionable Odor.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) FEDERAL APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY								
Applicable Requirement	**Requirement / Limit**	**Enforceable[a]**	**Affected Unit(s)**	**Applicable**	**Compliance Method**	**Monitoring Method**	**Compliance Status**	**Comments**
40 CFR Part 50 National Primary and Secondary Ambient Air Quality Standards		F		No				Applies to airsheds.
40 CFR Part 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans		F		Yes	Has not been triggered	Has not been triggered		40 CFR 51.166 (b) (23) (I) establishes an NMOC emission standard of 45 megatons per year.
40 CFR Part 52 Approval and Promulgation of Implementation Plans (PSD)		F		Yes				40 CFR 52.23 (b) (23) (I) establishes standard of 45 megatons per year.
40 CFR Part 53 Ambient Air Monitoring Reference and Equivalent Methods		F		No				Not applicable to sources.
40 CFR Part 54 Prior Notice of Citizen Suits Under the Clean Air Act		F		No				Administative and procedural requirement.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) FEDERAL APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY								
Applicable Requirement	**Requirement / Limit**	**Enforceable[a]**	**Affected Unit(s)**	**Applicable**	**Compliance Method**	**Monitoring Method**	**Compliance Status**	**Comments**
40 CFR Part 56 Regional Consistency Under the Clean Air Act		F		No				Administrative and procedural.
40 CFR Part 58 Ambient Air Quality Surveillance Regulations		F		No				Applies to airsheds and jurisdictions.
40 CFR Part 60 Subpart A NSPS General Provisions		F		Yes	40 CFR 60.752, 753, and 755.	40 CFR 60.754 and 756.		NSPS applicable to municipal solid waste landfills adopted March 12, 1996.
40 CFR Part 61 Subpart A NESHAPS	Requirements for all NESHAPS sources	F	Facility	Yes	See Subpart M.	See Subpart M.	In	Facility accepts asbestos-containing waste material. FDEP has NESHAPS authority and manages asbestos program.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.140 Applicability	Subpart applicable to sources listed, including waste disposal sites.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes r. specific requirements.
40 CFR Part 61.141 Definitions	Subpart definitions.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes no specific requirements.
40 CFR Part 61.145 Standard for Demolition and Renovation	Demolition and renovation standards for structures with asbestos-containing materials (ACMs). An asbestos survey is required prior to activities.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a requirement that applies when, and if, triggered by facility activity. Requirements apply if demolition or renovation occurs.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.150 Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations.	Waste disposal standards.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a procedural requirement that applies when, and if, triggered by facility activity. Applies if ACMs present in demolition or renovation operations at the facility. Final cover for entire landfill facility, including asbestos disposal areas, will meet requirements.
40 CFR Part 61.151 Standard for Inactive Waste Disposal for Asbestos Mills and Manufacturing and Fabricating Operations.	Standards for inactive disposal facility, including final cover requirements.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	Applicable as referenced by 40 CFR 61.154 (g) upon closure of the landfill.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.154 Standard for Active Waste Disposal Sites 61.154 (a), (c), (d)	Facility must have (a) no visible emissions, (c) meet daily cover requirements, or (d) use alternative emissions control approved by Agency.	F	Landfill	Yes	Daily cover of at least 6 inches of compacted nonasbestos-containing material is provided	Facility will maintain operations log of asbestos deposits and cover actions.	In	FDEP has authority for asbestos program, except for approval of alternative emissions control [40 CFR 61.154 (d)]; EPA maintains authority. Facility performs visual monitoring during disposal operations.
61.154 (g), (h)	Closure requirements.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	This is a procedural requirement that applies upon closure, at which time the indicated information will be provided to EPA.
61.154 (j)	Notification requirements for disturbing covered ACM waste disposal site.	F	Facility	Yes	Has not been triggered.	Has not been triggered.	In	Applicable if triggered; disturbing covered ACM waste disposal site not expected in the foreseeable future.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 61 SUBPART M - NESHAPS FOR ASBESTOS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 61.155 Standard for Operations that Convert ACM Waste into Asbestos-Free Material		F		No				This facility is not in the source category.
40 CFR Part 61.156 Cross-Reference to Other Asbestos Regulations	Provides reference to other asbestos regulatory programs.	F	Facility	Yes	No requirements.	No requirements.	In	This section provides information but imposes no specific requirements.
40 CFR Part 61.157 Delegation of Authority	Delegation of implementations and enforcement authority.	F		No				This rule applies only to agencies. FDEP has authority except for sections specified that remain under federal authority.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) FEDERAL APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY								
Applicable Requirement	**Requirement / Limit**	**Enforceable[a]**	**Affected Unit(s)**	**Applicable**	**Compliance Method**	**Monitoring Method**	**Compliance Status**	**Comments**
40 CFR Part 62 State Plans for Designated Facilities and Pollutants		F		No				Administrative and jurisdictional.
40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories		F		No				Not any of the listed source categories; general provisions not applicable until source subject to a standard.
40 CFR Part 65 Delayed Compliance Orders Under the Clean Air Act		F		No				Administrative and jurisdictional.
40 CFR Part 66 Assessment and Collection of Noncompliance		F		No				Administrative and jurisdictional.
40 CFR Part 67 Federal Approval of State Noncompliance Penalty Programs		F		No				Administrative and jurisdictional.
40 CFR Part 69 Special Exemptions from Requirements of the Clean Air Act		F		No				This facility is not in the source category.
40 CFR Part 81 Designating Areas for Air Quality Planning		F		No				Administrative and jurisdictional.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 - PROTECTION OF STRATOSPHERIC OZONE

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 82 Subpart A Production and Consumption Controls		F		No				Landfill does not sell or distribute chlorofluorocarbons.

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

40 CFR 82.30	Purpose and scope; applicability of rule.	F	Facility	Yes	None.	None.	In	Preamble to rule; no specific requirements imposed.
40 CFR 82.32	Definitions.	F	Facility	Yes	None.	None.	In	This section provides information, but imposes no specific requirements.
40 CFR 82.34 (a)	No person may perform service on a motor vehicle air conditioner involving refrigerant without approved equipment and proper training and certification.	F	Shop	Yes	Shop technicians are certified and equipment is approved.	Landfill will maintain personnel certifications and equipment approvals.	In	

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.34 (b)	May not sell or distribute Class I or Class II substance that is suitable for use as a refrigerant.	F		No				Facility does not sell or distribute these materials.
40 CFR 82.34 (c)	Technician training program must comply with standards.	F		No				Facility does not train technicians.
40 CFR 82.36 (a), (b)	Refrigerant recycling/ recovery equipment must be certified and meet standards set forth in Appendix A of this subpart.	F	Shop	Yes	Equipment has been certified and meets standards.	Landfill will maintain equipment certifications.	In	
40 CFR 82.36 (c)	Administrator will maintain a list of approved equipment.	F		No				Applies only to agencies.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.38	Approved independent standards testing organization.	F		No				Not in this source category
40 CFR 82.40	Technician training and certification program requirements.	F		No				Facility does not offer these training and certification programs.
40 CFR 82.42 (a)	No later than 1/1/93, any person repairing or servicing motor vehicle air conditioners shall certify to the Administrator that such person has acquired training and is properly using approved equipment.	F	Shop	Yes	A letter containing certification has been submitted to the EPA.	None.	In	

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.42 (b)	Record keeping: Records of names and addresses of any facility where refrigerant is sent, records demonstrating persons authorized to operate equipment are currently certified, must be kept on site 3 years.	F	Facility	Yes	Facility contracts with service that accepts refrigerant for recycling; invoices from recycler retained. Certificates for workers retained.	Facility will continue to retain records.	In	

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

40 CFR PART 82 SUBPART B - SERVICING OF MOTOR VEHICLE AIR CONDITIONERS

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR 82.42 (c)	Public notification requirements for retail sales of Class I or II substances useable as refrigerant.	F		No				Facility does not sell these substances.
40 CFR 82, Appendix A, Subpart B	Service guidelines for technicians when repairing vehicles and operating equipment.	F	Shop	Yes	Technicians are trained and certified in proper handling procedures.	Facility will maintain current training and certification of its technicians.	In	

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Applicable Requirement	Requirement / Limit	Enforceable[a]	Affected Unit(s)	Applicable	Compliance Method	Monitoring Method	Compliance Status	Comments
40 CFR Part 82 - Subpart E Labeling of Products using Ozone Depleting Substances		F		No				Landfill does not sell or distribute chlorofluorocarbons.
40 CFR Part 82 - Subpart F Recycling and Emission Reduction		F		No				No maintenance or repair o. appliances is performed.
40 CFR Part 85 Control of Air Pollution from Motor Vehicles and Motor Vehicles Engines		F		No				Landfill equipment exempt from testing; facility voluntarily tests its own vehicles.
40 CFR Part 86 Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines; Certification and Test Procedures		F		No				Not in this source category; applies to manufacturers.
40 CFR Part 87 Control of Air Pollution from Aircraft and Aircraft Engines		F		No				Not in this source category.
40 CFR Part 88 Clean-Fuel Vehicles		F		No				Not in this source category.

[a] "F" indicates federally enforceable requirement.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) FEDERAL APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY								
Applicable Requirement	**Requirement / Limit**	**Enforceable[a]**	**Affected Unit(s)**	**Applicable**	**Compliance Method**	**Monitoring Method**	**Compliance Status**	**Comments**
40 CFR Part 258.23		F	Landfill	Yes				Established criteria for migration of explosive gases.
40 CFR Part 258.24		F	Landfill	Yes				Specifies air criteria for municipal solid waste landfills.

[a] "F" indicates federally enforceable requirement.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-4, F.A.C.: PERMITS	
Chapter Number (F.A.C.)	**Description**
62-4.030	General Prohibition.
62-4.040	Exemptions.
62-4.050	Procedure to Obtain Permits; Application.
62-4.060	Consultation.
62-4.070	Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080	Modification of Permit Conditions.
62-4.090	Renewals.
62-4.100	Suspension and Revocation.
62-4.110	Financial Responsibility.
62-4.120	Transfer of Permits.
62-4.130	Plant Operation - Problems.
62-4.150	Review.
62-4.160	Permit Conditions.
62-4.210	Construction Permits.
62-4.210	Operation Permit for New Sources.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-103, F.A.C.: RULES OF ADMINISTRATIVE PROCEDURE	
Chapter Number (F.A.C.)	**Description**
62-103.150	Public Notice of Application and Proposed Agency Action.
62-103.155	Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS	
Chapter Number (F.A.C.)	**Description**
62-210.300	Permits Required.
62-210.300 (1)	Air Construction Permits.
62-210.300 (2)	Air Operation Permits.
62-210.300 (3)	Exemptions.
62-210.300 (3) (a)	Full Exemptions.
62-210.300 (3) (b)	Temporay Exemptions.
62-210.300 (3) (c)	Record Keeping.
62-210.300 (5)	Notification of Startup.
62-210.300 (6)	Emissions Unit Reclassification.
62-210.350	Public Notice and Comment.
62-210.350 (3)	Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
62-210.360	Administrative Permit Corrections.
62-210.370 (3)	Annual Operating Report for Air Pollutant Emitting Facility.
62-210.650	Circumvention.
62-210.900	Forms and Instructions.
62-210.900 (1)	Application for Air Permit - Long Form, Form Instructions.
62-210.900 (5)	Annual Operationg Report for Air Pollutant Emitting Facility, Form and Instructions.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION	
Chapter Number (F.A.C.)	**Description**
62-213.205	Annual Emissions Fee.
62-213.300 (3) (k)	Record Keeping and Reporting Requirements.
62-213.400	Permits and Permit Revisions Required.
62-213.410	Changes Without Permit Revision.
62-213.412	Immediate Implementation Pending Revision Process.
62-213.420	Permit Applications.
62-213.430	Permit Issuance, Renewal, and Revision.
62-213.440	Permit Content.
62-213.460	Permit Shield.
62-213.900	Forms and Instructions.
62-213.900 (1)	Major Air Pollution Source Annual Emissions Fee Form, Form and Instructions.

FACILITY REGULATIONS (RESPONSE TO II. PART 4b-1) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-252, F.A.C.: GASOLINE VAPOR CONTROL	
Chapter Number (F.A.C.)	**Description**
62-252.300	Gasoline Dispensing Facilities - Stage I.
62-252.300 (3) (a) (2)	Control Technical Requirement.
62-252.300 (4)	Compliance Schedule.
62-252.300 (6)	Record Keeping.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY
CHAPTER 62-256, F.A.C.: OPEN BURNING AND FROST PROTECTION FIRES.
CHAPTER 62-257, F.A.C.: ASBESTOS NOTIFICATION AND FEE.
CHAPTER 62-281, F.A.C.: MOTOR VEHICLE AIR CONDITIONING REFRIGERANT RECOVERY AND RECYCLING.

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS - TITLE V CORE LIST ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS	
Chapter Number (F.A.C.)	**Description**
62-296.310 (1) (a)	General Particulate Emission Limiting Standards: Applicability.
62-296.320 (2)	Objectionable Odor Prohibited.
62-296.320 (3)	Industrial, Commercial, and Municipal Open Burning Prohibited.
62-296.320 (4)	Unconfined Emissions of Particulate Matter.

Exhibit F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSION MONITORING	
Chapter Number (F.A.C.)	**Description**
62-297.310	General Compliance Test Requirements.
62-297.340	Frequency of Compliance Test.
62-297.450 (4)	Record Keeping & Reporting.

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-700, F.A.C.: SOLID WASTE MANAGEMENT	
Chapter Number (F.A.C.)	**Description**
62-701.400 (10)	Construction Requirement for Landfill Gas Control Systems.
62-701.400 (11)	Construction Requirements for Landfill Gas Recovery Facilities.

EMISSION UNIT REGULATIONS (RESPONSE TO III.B) STATE APPLICABLE REQUIREMENTS ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY	
CHAPTER 62-709, F.A.C.: CRITERIA FOR PRODUCTION AND USE OF COMPOST	
Chapter Number (F.A.C.)	**Description**
62-709.400 (1)	Prohibition of Air Pollutant Discharge Resulting in Objectionable Odor.

EXHIBIT G
EMISSONS CALCULATIONS

The following is a summary of assumption and methodology for calculating the 1996 emissions from the Orange County Solid Waste Management Facility.

Controlled landfills: Emissions from Cells A-K and 7B were considered emissions from a controled landfill due to existing passive vents. Estimated emissions were calculated by using the actual field data.

Fugitive emissions: Emissions from uncontrolled cells or operation activities such as ther existing Class III cells, the composting operation and the pre-1985 closed Class I landfills were considered fugitive and were estimated to have approximately 10% of the emissions from controlled landfills.

Underground and Above ground fuel storage tanks: The emissions are based on EPA AP-42 parameters; assuming all vehicles in use at the Landfill are fuelked from these fuel tanks. Further assumptions for calculating the emissions from these fuel tanks are included in this exhibit.

Unpaved Roads: Emissions from vehicular traffic on unpaved roads were estimated based on the traffic from the staging area of the Landfill to the disposal cells. Since the majority of the roads at the landfill are paved, it was assumed that approximately one mile of unpaved road exists from the toe of the disposal cell to the area where the waste is actually unloaded.

CALCULATING VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM FUEL STORAGE AND DISPENSING ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Fuel Storage in Operation	VOC Emission Unit (AP-42)	VOC Emissions (Mg/yr)
Underground Tanks		
2 - 12,000-gallon diesel fuel	Retail operation = 1.0 lbs/yr/1,000 gallons throughput	0.205
Mobile fuelers		
3 - 500-gallon diesel fuel	Retail operation = dispensing 11.0 lbs/yr/1,000 gallons pumped Retail operation = transit 0.005 lbs/yr/1,000 gallons transferred	0.081 0.000037
Above Ground Tanks		
1 - 1,000-gallon gasoline tank	Retail operation = 0.057 lbs/yr./1,000 gallons throughput	0.0025
TOTAL		**0.288**

CALCULATIONS FOR EMISSIONS ASSOCIATED WITH ON-SITE FUEL TANKS

1. Underground Tanks

Assumptions:

Diesel fuel dispensed for 1 year = 451,947 gallons
(For the year 1995 Landfill inventory data)

VOC Emission (Mg/yr)=

[451,947gal.] [1/1,000 gal] [1.0 lb/unit] [453 g/lb] [Mg/1x10^6]=

TOTAL VOC from Underground Tanks = 0.205 Mg/yr

2. Mobile tankers

Assumptions:

Vehicles at disposal site = 3
Operation days per year = 360 days/yr
Operation hours per day = 12 hours/day
Operations miles per hour = 15 miles/hour
Operations gallons per mile = gallons/4 miles
Filling - VOC (lbs/unit) = 11.0
Transit - VOC (lbs/unit) = 0.005

VOC(Mg/yr), **filling** =

[3 veh.][360 days/yr][12 hrs/day][15 mph][gal/4 mi][1/1,000 gal] [11.0 lb/unit][453 g/lb][Mg/1x10^6 g]=

= **0.081 Mg/yr**

VOC (Mg/yr), **transit** =

[3 vehicles][360 days/yr][12 hrs/day][15 mph][gal/4 mi][1/1,000 gal] [0.005 lb/unit] [453g/lb] [Mg/1x10^6 g]=

= **0.000037 Mg/yr**

TOTAL VOC Mobile Tanker = 0.081 + 0.000037 = 0.081 Mg/yr

3. <u>Gasoline Above Ground Tanks</u>

Assumptions:

Vehicles = 40
Operation days per year = 220 days/yr
Operation hours per day = 8 hours/day
Operations miles per hour = 35 miles/hour
Operations gallons per miles = gallons/25 miles
VOC (lbs/unit) = 0.057

VOC (Mg/yr)=
[40 veh.][220 days/yr][8 hrs/day][35 mph][gal/25 mi][1/1,000 gal] [0.057 lb/unit][453 g/lb][Mg/1x10^6 g] =

Total VOC Gasoline Above Ground Tank = <u>0.0025 Mg/yr</u>

CALCULATION FOR EMISSIONS ASSOCIATED WITH UNPAVED ROADS

$$[\text{lb PM/VMT}] = \mathbf{k}\,[5.9]\,[\mathbf{s}/12]\,[\mathbf{S}/30]\,[\mathbf{W}/3]^{0.07}\,[\mathbf{w}/4]^{0.5}\,[(365-\mathbf{p})/365]$$

Where:

VMT= Vehicle miles traveled
k = Dimension, less particle-size multiplier (0.8)
s = Silt content of road-surface material
S = Mean vehicle speed (miles per hour)
W = Mean vehicle weight (tons)
w = Mean number of wheels per vehicle
p = number of days with at least 0.01 inches of rain per year

Assumptions:

VMT= 1 mile per trip, 450 vehicles/trip= 450 miles
k = 0.8
s = 6
S = 15 mph, based on speed limit
W = avg. 80,000 lb/vehicle = 40 tons
w = 10 wheels/vehicle
p = 111 days per rainfall data from the landfill for the year 1995

[lb PM/450 miles]=

$$[0.8][5.9][6/12][15\text{ mph}/30][40\text{ tons}/3]^{0.7}[10\text{ wheels/veh.}/4]^{0.5}[(365-111\text{ days})/365]$$

TOTAL PM = <u>1.63 Mg/yr</u>

EXHIBIT G
SUMMARY OF EMISSIONS CALCULATIONS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Analyte	Avg. Conc.* (ppbv)	MW	Avg. Conc.* ug/m^3	Year-1996 Mass Emission Rate (lb/yr)	Year-2002 Mass Emission Rate (lb/yr)	Year-1996 Mass Emission Rate (Mg/yr)	Year-2002 Mass Emission Rate (Mg/yr)
I. Controlled Landfills							
VOC **(ppm)	9744	12	4,864,205	**867,762**	**1,139,407**	**393.10**	**516.15**
2-Butanone	7650	7206	22,932	4,091	5,372	1.85	2.43
Methyl Isobutyl Ketoner	1209	100	5,028	897	1,178	0.41	0.53
Methanol	7042	32.03	9,383	1,674	2,198	0.76	1.00
Vinyl chloride	384	62.5	999	178	234	0.08	0.11
Methylene chloride	200	84.94	706	126	165	0.06	0.07
Chloroform	157	119.38	778	139	182	0.06	0.08
Carbon tetrachloride	157	153.82	1,002	179	235	0.08	0.11
Benzene	272	78.12	883	158	207	0.07	0.09
cis-1,3-Dichloropropene	157	110.97	723	129	169	0.06	0.08
Toluene	9033	92.15	34,629	6,178	8,112	2.80	3.67
trans-1,3-Dichloropropene	157	110.97	723	129	169	0.06	0.08
1,1,2-Trichloroethane	157	133.41	869	155	204	0.07	0.09
Chlorobenzene	151	112.56	706	126	165	0.06	0.07
Ethylbenzene	5115	106.17	22,591	4,030	5,292	1.83	2.40
m,p-Xylene	7912	106.97	35,207	6,281	8,247	2.85	3.74
o-Xylene	2730	106.17	12,058	2,151	2,824	0.97	1.28
Styrene	157	104.16	678	121	159	0.05	0.07
1,1,2,2-Tetrachloroethane	157	167.85	1,093	195	256	0.09	0.12
1,4-Dichlorobenzene	750	147.01	4,587	818	1,075	0.37	0.49
1,2,4-Trichlorobenzene	157	181.45	1,182	211	277	0.10	0.13
Hexachlorobutadiene	157	257.81	1,679	300	393	0.14	0.18
Carbonyl sulfide			250	45	58	0.02	0.03
Carbon Disulfide			105	19	25	0.01	0.01
II. Fugitive							
5% of Controlled Landfills				43,388	56,970	20	26
Sub-Total Fugitive				**43,388**	**56,970**	**19.65**	**25.81**
III. Fuel Tanker							
Sub-Total VOC				**452**	**452**	**0.288**	**0.288**
IV. Unpaved Roads							
Sub-Total PM				**3,581**	**3,581**	**1.63**	**1.63**
TOTAL MASS EMISSIONS				**915,183**	**1,200,410**	**414.67**	**543.88**

Notes:
*Average of analysis from 6 vents
** Measured as non-methane organic carbon

Addendum 1

Application for Air Operation Permit Orange County Solid Waste Management Facility

Public Utilities Division

Orange County, Florida

CH2M/G&R - THE JOINT VENTURE

Project No. 94520.14A

August 8, 1996

Addendum 1
Application for FDEP Title V Operation Permit
Solid Waste Management Facility
Orange County, Florida

This addendum addresses the applicable Federal and State regulatory requirements for the Title V permit for the Orange County Solid Waste Management Facility. The lists of applicable regulations were originally included with the application for Title V Operation Permit produced by CH2M/G&R and submitted on June 14, 1996. The regulatory applicability tables have been revised.

Exhibit E

Exhibit E included in this addendum contains Exhibit E-1, Federal Regulatory Applicability Review, and Exhibit E-2, State Regulatory Applicability Review. The attached Exhibit E supercedes the exhibit from the original permit application. Replace the original exhibit with the tables included in Exhibit E in this addendum.

Exhibit F

In this addendum, the regulatory applicability tables have been removed from Exhibit F. For the Orange County Solid Waste Management Facility, the emissions unit is considered to be the entire facility; therefore, the unit-specific regulatory tables are unnecessary. Replace the original exhibit with the text included in Exhibit F in this addendum.

EXHIBIT E

FACILITY REGULATION (RESPONSE TO II. PART 4B-1)
FEDERAL & STATE APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

EXHIBIT E-1

FEDERAL REGULATORY APPLICABILITY REVIEW

Exhibit E-1
Federal Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 50 50.1-50.12	National Primary and Secondary Ambient Air Quality Standards		X	Facilities are not required to demonstrate compliance with NAAQS except as part of a PSD/NSR review or as requested to on a case-by-case basis by state agencies. States are required to promulgate emissions regulations which, when complied with by facilities, will ensure attainment and maintenance of NAAQS. These emission regulations are incorporated into the State Implementation Plan (SIP).	Applies to ambient air quality standards for geographic areas.
40 CFR 51 - 51.100-51.860	Requirements for Preparation, Adoption, and Submittal of Implementation Plans		X	Part 51 requires states to develop and obtain EPA approval of SIP to attain and maintain compliance with National Ambient Air Quality Standards (NAAQS). Part 52 contains a list of EPA's actions relative to these plans for each state. Part 51 is not directly applicable to facilities.	Requirements apply to state air programs.
40 CFR 52 Subpart A 52.01-52.32	General Provisions for Approval and Promulgation of State Implementation Plans		X	This part sets forth the Administrator's approval and disapproval of state plans and the Administrator's promulgation of such plans or portions thereof. Approval of a plan or any portion thereof is based upon a determination by the Administrator that such plan or portion meets the requirements of section 110 of the Act and the provisions of part 51 of this chapter.	Requirements apply to state air programs.
40 CFR 52 Subpart A 52.21	Prevention of Significant Deterioration (PSD)		X	This paragraph is potentially applicable to any facility that is constructed or any facility to which physical changes are made since August 7, 1977 for which the state has not received EPA's approval to administer the PSD program.	Florida has been granted approval to administer the PSD program.
40 CFR 52 Subpart A 52.24	Statutory Restrictions on New Sources (NSR)		X	This paragraph is potentially applicable to any facility that is constructed or any facility to which physical changes are made since June 30, 1979 in any area designated as nonattainment for which the state has not received EPA's approval of its SIP as meeting the requirements of Part D, Title I of the CAA. The requirements pertain only to the nonattainment pollutant(s).	Facility is located in an attainment area for criteria pollutants.
40 CFR 52 Subpart K 52.520-52.535	Florida		X	Part 52 contains a chronological listing of EPA's approval actions of a state's state implementation plan (SIP). The SIP is an agreement between EPA and a State air pollution control agency on how a state will control air pollution for seven criteria pollutants (Lead, Ozone, Nitrogen oxides, Sulfur dioxide, Particulate matter with diameter less than 10 micrometers (PM-10), Volatile Organic Compounds (VOC), and carbon monoxide (CO)) so as to attain and maintain National Ambient Air Quality Standards (NAAQS). Those regulations approved into this section have been approved and by definition are Federally-enforceable. For specific regulations, refer to the State-specific regulations.	Requirements apply to State air programs.
40 CFR 52 Subpart EEE 52.2850	Approval and Promulgation of Plans		X	Only the states of Deleware, New Jersey, Pennsylvania, Kansas, Virginia, Maryland, Colorado, Missouri, District of Columbia, and Massachusetts have obligations in this section. Does not apply to title V facilities specifically but regulations that resulted from these requirements may be contained in the state-specific regulations.	Facility in not located in a state with obligations in this section.

Exhibit E-1
Federal Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 60 Subpart A 60.1 - 60.19	General Provisions for NSPS	X		Applies to all facilities subject to NSPS. Includes a definition of what activities at a source constitute a modification, construction or reconstruction. Also includes general notification and recordkeeping requirements, general control device requirements, and time period after inital source startup or modification that compliance with a NSPS standard must be shown.	NSPS are applicable to municipal solid waste landfills.
40 CFR 60 Subpart B 60.20 - 60.29	Adoption and Submittal of State Plans for Designated Facilities		X	The provisions of this subpart apply to states upon publication of a final guideline document under 60.22(a).	Provisions apply to States.
40 CFR 60 Subpart C 60.30 - 60.31	Emission Guidelines and Compliance Times	X		The following subparts contain emission guidelines and compliance times for the control of certain designated pollutants in accordance with section 111(d) of the Act and subpart B. (a) Subpart Cb--Municipal Waste Combustors; (b) Subpart Cc--Municipal Solid Waste Landfills; (c) Subpart Cd--Sulfuric Acid Production Plants.	Facility is a municipal solid waste landfill.
40 CFR 60 Subpart Cb 60.30b - 60.39b	Emissions Guidelines and Compliance Times for Municipal Waste Combustors		X	Affected units include those at Municipal Waste Combustor (MWC) plants which have an aggregate plant capacity of more than 35 Mg/day. There is an exemption from emission standards for facilities which burn tires or fuel derived from tires and that burn no other municipal solid waste. Recordkeeping requirements still apply. Municipal Waste Combustors that fire exclusively medical wastes are also exempt from this regulation. Facilities which started construction, reconstruction, or modification on or before 12/20/89 must comply.	Facility does not combust municipal solid waste.
40 CFR 60 Subpart Cc 60.30c - 60.36c	Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills	X		Provisions of this subpart apply to existing MSW landfill for which construction, reconstruction or modification was commenced before May 30, 1991; have a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters; and have a nonmethane organic compound emission rate of 50 megagrams per year or more. Physical or operational changes made to an existing MSW landfill solely to comply with an emission guideline are not considered a modification or reconstruction.	Facility is a municipal solid waste landfill constructed before May 1991 with a design capacity greater than 2.5 million Mg and a nonmethane organic compound emission rate greater than 50 Mg/yr.
40 CFR 60 Subpart Db 60.40b - 60.49b	Standards of Performance for Industrial -Commercial-Institutional Steam Generating Units		X	Steam generating units, including duct burners, which have a heat input capacity of any fuel combusted in the steam generator of greater than 100 MMBtu/hr not covered by Subparts D, or Da. Note: Recovery boilers may be subject to this standard depending upon how much fossil fuel they burn. Steam generators whose construction, reconstruction or modification commenced after June 19, 1984 must comply. Any change to the existing steam generating unit for the purposes of combusting gases containing Total Reduced Sulfur which includes the compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide is not considered a modification.	Facility does not have any steam generating units.

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Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 60 Subpart Dc 60.40c-60.48c	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units		X	Any device with a design maximum heat input capacity equal to or less than 100 MMBtu/hr but equal to or greater than 10 MMBtu/hr that combusts fuel and produces steam or heats water or any other heat transfer medium including any duct burner that combusts fuel and is part of a combined cycle system. Steam generators whose construction, reconstruction, or modification commenced after June 9, 1989 must comply.	Facility does not have any steam generating units.
40 CFR 60 Subpart E 60.50 - 60.59a	Standards of Performance for Incinerators		X	Facilities with a charging rate of more than 50 tons/day which were constructed, reconstructed or modified after 08/17/71. An incinerator is defined as any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter.	Facility does not incinerate solid waste material.
40 CFR 60 Subpart Eb 60.50b - 60.59b	Standards of Performance for Municipal Waste Combustors		X	The affected unit is any device with a heat input capacity greater than 250 TPD of Municipal Solid Waste (MSW) or Refuse-Derived Fuel (RDF) . MSW is household, commercial/retail, and/or institutional waste. RDF is a type of MSW made by shredding and size reduction of MSW. Devices burning MSW or RDF derived solely from tires are exempt from this subpart except for the initial report required under 60.59a, paragraph (a). Cofired combustors that burn less than 30% segregated medical waste and no MSW are exempt. A cofired combustor is a unit combusting MSW or RDF with a non-MSW fuel and subject to a federally enforceable permit limitation limiting the unit to combusting a fuel feed stream, 30% or less of the weight which is comprised in aggregate of MSW or RDF measured on a 24-hour basis. This standard applies to any facility that undertakes construction, reconstruction, or modification after December 20, 1989.	Facility does not combust municipal waste.
40 CFR 60 Subpart K 60.110 - 60.113	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June11, 1973, and Prior to May 19, 1978		X	Vessels with capacities greater than 40,000 gallons that store petroleum, condensate, and any finished or intermediate products manufactured at a petroleum refinery except Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D may be subject to compliance. Vessels with capacities greater than 40,000 gallons and less than 65,000 gallons whose construction, reconstruction or modification commenced after June 11, 1973 and before May 19, 1978 must comply.	Facility has no petroleum storage vessels > 40,000 gallons.
40 CFR 60 Subpart Ka 60.110a - 60.115a	Standards of Perform-ance for Storage Vessels for Petroleum Liquids for which Construction, Recon-struction, or Modification commenced after May 18, 1978 and before July 23, 1984		X	Vessels with capacities greater than 40,000 gallons that store petroleum, condensate, and any finished or intermediate products manufactured at a petroleum refinery except Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D. Vessels with capacities less than 40,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer are exempt. Vessels whose construction, reconstruction or modification commenced after May 18, 1978 and before July 23, 1984 must comply.	Facility has no petroleum storage vessels > 40,000 gallons.

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Regulation	Description	Applicable		Description of Applicability	Explanation
		Yes	No		
40 CFR 60 Subpart Kb 60.110b - 60.117b	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X	Vessels with a capacity greater than or equal to 40 cubic meters (10,568 gallons) that store organic liquids that can emit VOCs except those VOCs determined by the EPA not to contribute significantly to ozone formation. Tanks from which motor vehicles are fueled are exempt. Vessels whose construction, reconstruction or modification commenced after July 23, 1984 must comply.	Facility does not have VOL storage vessels greater than or equal to 40 cubic meters.
40 CFR 60 Subpart O 60.150 - 60.156	Standards of Performance for Sewage Treatment Plants		X	Affected facilities include incinerators that combust wastes containing at least 10% sewage sludge (dry basis) produced by municipal sewage treatment plants, or each incinerator that charges more than 1000 kg./day municipal sewage sludge (dry basis). Affected facilities that commence construction, reconstruction or modification after June 11, 1973 must comply.	Facility does not incinerate sewage sludge.
40 CFR 60 Subpart GG 60.330 - 60.335	Standards of Performance for Stationary Gas Turbines		X	(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired. (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of 60.332.	Facility does not have a stationary gas turbine with heat input at peak load greater than 10.7 gigajoules per hour, does not combust municipal waste or produce sulfuric acid.
40 CFR 60 Subpart MM 60.390 - 60.398	Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations		X	Affected components include prime coat operations, guide coat operations, and topcoat operations. Affected units that commenced construction, modification, or reconstruction after October 5, 1979 must comply.	Facility does not perform surface coating operations for light duty trucks and automobiles.
40 CFR 60 Subpart WWW 60.750 - 60.759	Standards of Performance for Municipal Solid Waste Landfills	X		The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction, modification, or began accepting waste on or after May 30, 1991. Physical or operational changes made to an existing MSW landfill solely to comply with Subpart Cc of this part are not considered construction, reconstruction, or modification for the purposes of this section.	The facility was modified after May 30, 1991.
40 CFR 61 Subpart A 61.01 - 61.19	General Provisions for National Emission Standards for Hazardous Air Pollutants (NESHAP)	X		This part applies to the owner or operator of any stationary source for which a standard is prescribed under this part. This section includes definitions applicable to all 40 CFR Part 61 standards including the definition of what physical or operational changes trigger a modification or reconstruction. No more 40 CFR Part 61 regulations will be promulgated. All regulations that were to be promulgated under 40 CFR Part 61 will now be promulgated under 40 CFR Part 63.	The municipal solid waste landfill receives asbestos-containing waste materials, which is a regulated NESHAP under Subpart M of 40 CFR 61.

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Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 61 Subpart M 61.140 - 61.157	National Emission Standard for Asbestos	X		Applies to facilities demolishing, dispensing, or transforming asbestos. Each owner/operator shall either discharge no visible emissions to the outside air, including fugitive sources, or use the methods specified by 61.152 to clean emissions.	Facility receives asbestos-containing waste material. Applicable portions are 62.140, 62.141, 62-145, 62-148, 62-150, 62-153, 62.154, and 62-156.
40 CFR 62 Subpart A 62.01-62.12	General Provisions for Approval and Promulgation of State Plans for Designated Facilities and Pollutants (NESHAP Delegations)		X	This part sets forth the Administrator's approval and disapproval of State plans for control of designated pollutants and facilities, and the Administrator's promulgation of such plans or portions thereof. Approval of a plan or any portion of a plan is based on a determination by the Administrator that it meets the requirements of Section 111(d) of the act and the provisions of Part 60 of this chapter. The pollutants andsource categories regulated under section 111(d) of the Clean Air Act include fluoride emissions from phosphate fertilizer plants, sulfuric acid mist from sulfuric acid mist plants, total reduced sulfur from kraft pulp.mills, and fluoride emissions from primary aluminum plants. Part 62 includes a chronological list of all actions pertaining to a states section 111(d) plans along with a list of sources covered under each standard and a negative declaration in the event that a state has no sources in the particular source category.	The Orange County Solid Waste Management Facility is not a regulated facility under this requirement.
40 CFR 63 Subpart A 63.1 - 63.15	General Provisions for NESHAP		X	Applies to both major and area sources of HAP . A major source is one that emits or has potential considering controls, in the aggregate, 10 tpy or more of any HAP or 25 tpy or more of any combination of HAP, unless specific regulations or the regulatory authority establish a lesser quantity. New sources are sources that have initial startup dates after the effective relevant standard date of March 16, 1994. Responsibility to notify EPA that source is subject to standard no later than 120 days after effective date (before sources) or 120 days after intial startup (after).	The facility is not a major source of HAP or part of an area source of HAP.
40 CFR 63 Subpart B 63.50-63.56	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112 (g) and 112 (j)		X	Section 112(j) applies to major stationary sources of air toxics in the event that EPA fails to promulgate a MACT standard within 18 months after the scheduled deadline. In that event, the source and the permitting agency must formulate a MACT determination for the source category. This rule currently does not apply since EPA has not yet missed a MACT promulgation deadline by more than 18 months. On the basis of section 112(g), this subpart also requires major sources of air toxics upon modification, reconstruction, or construction to apply MACT to the change if the change is greater than a de minimis amount. A source may offset emissions of a more hazardous air polllutant to avoid applying MACT in the case of a modification. This rule is not yet applicable since EPA has not promulgated implementing regulations.	Facility is not a major source of HAP.
40 CFR 63 Subpart D 63.70 - 63.81	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants		X	Allows sources that voluntarily make early reductions of HAP emissions to delay compliance w/MACT for 6 yrs. EPA has revised several of the deadlines to help resolve problems resulting from the overlapping of CAA programs.	If the facility chooses to participate in the early reduction program, it will apply for a compliance extension. At this time, the facility is not a major source of HAP.

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Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 63 Subpart Q 63.400-63.406	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers		X	The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994 and are either major sources or are integral parts of facilities that are major sources as defined in 63.401. This regulation does not apply to industrial process cooling towers that exclusively treat cooling water from HVAC systems. The regulation does apply to cooling towers that treat both HVAC cooling water and process cooling water.	The facility does not operate an industrial process cooling tower.
40 CFR 63 Subpart T 63.460 - 63.469	NESHAP: Halogenated Solvent Cleaning		X	Applies to new and existing organic halogenated solvent cleaners (degreasers) using any of the hazardous air pollutants listed in CAA. Applies specifically to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent trichloroethylene, 1,1,1-trichloroethane, carbon cleaning machines that use any solvent tetrachloride, or chloroform as the containing methylene chloride; solvent. perchlorotheylene; trichloroethylene; 1,1,1-trichloroethane; carbon tetrachloride; or chloroform; or any combination of these halogenated HAP solvents, in a total concentration greater than 5% by weight, as a cleaning or drying agent. Proposes stringent MACT for batch vapor and in-line cleaning machines.	Facility does not have a cleaning machine that uses methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform as the cleaning solvent.
40 CFR 64	Enhanced Monitoring		X	Enhanced Monitoring regulations will be promulgated by EPA as part of the CAM rule proposed in the fall of 1995 and expected to be promulgated in the summer of 1996.	Applicability of this regulation will be determined pending finalization of the regulation.
40 CFR 66	Assessment and Collection of Noncompliance Penalties by EPA	X		This part is applicable to facilities that are a source of air pollutants that have made application for a Title V permit. EPA may send a notice of noncompliance if the source is in violation and the State has failed to send a notice of noncompliance or pursue diligently the assessment or collection of the penalty.	The facility is a source of air pollutants that has made application for a Title V permit. However, the facility is not in noncompliance, so no action is ongoing.
40 CFR 67 Subpart C 67.21	Federal Notice of Noncompliance to Owners or Operators of Sources in States with Approved Programs		X	EPA may issue a notice of noncompliance to the owner or operator of any source in a State with an approved program if he determines that the State or its local agent has failed to issue such notice, provided that EPA shall first give 30 days notice to the State of his intent to issue a notice of noncompliance to the owner or operator of the source in question unless the State or its agent does so first.	Provisions apply to the Administrator not to the facility.
40 CFR 67 Subpart D 67.31 - 67.33	EPA Review of State Compliance or Exemption Decisions		X	EPA may review any determination by a State or its agent that a source owner or operator is or is not in compliance with applicable legal requirements or is or is not entitled to an exemption.	Provisions apply to the Administrator not to the facility.
40 CFR 68 Subpart B	Risk Management Plan Requirements (Reserved)		X	Requires owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan. Facilities that manage unlisted extremely hazardous substance or less than a threshold qty of a listed substance must also comply with these requirements but in a less formal way. Not promulgated at this time.	Applicability of this regulation will be determined pending finalization of the regulation.

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Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 68 Subpart C 68.100 - 68.130	Regulated Substances for Accidental Release Prevention		X	Provides a list of regulated substances and their threshold quantities for determining whether a source is subject to 112(r). This section will apply to facilities upon promulgation of implementing regulations for section 112(r). Only title V requirement is for a source to certify whether or not it is subject to 112(r) using these pollutants and threshold values. In many states, this requirement is met by checking a box on the title V permit application certifying that the facility is subject to 112(r) upon EPA's promulgation of regulations implementing section 112(r). Ammonia used as an agricultural nutrient, when held by farmers, is exempt from this regulation.	Facility does not store more than the threshold quantity of any of the listed substances.
40 CFR 70.1 - 70.11	State Operating Permit Programs	X		Requires operating permits for all sources regulated under the CAA and imposes a fee system to pay for permitting costs. A state program must provide for permitting of at least major sources, affected sources, sources subject to standards under Section 111 or 112 of the Act, and sources in a source category designated by the Administrator pursuant to this section. Minor sources (including minor NSPS and NESHAPS sources) are deferred from having to apply for a title V permit for a period of up to 5 years from promulgation (7/21/97). For MACT standards promulgated after 7/21/92, the standard itself will specify whether EPA requires a title V permit. This subpart of the Code of Federal Regulations will include a chronological listing of EPA's approval, interim approval, or disapproval action for each state/local programs title V operating permit program.	The facility has made application to the State of Florida for a Title V air permit.
40 CFR 72.1 - 72.96	Acid Rain Program: Permits Regulation and Allowance System		X	Establishes general provisions and operation permit requirements for affected sources and units under the Acid Rain Program.	Facility does not operate fossil-fuel-fired electric utilities.
40 CFR 73.1 - 73.90	Acid Rain Program: Allowance System		X	Establishes the requirements and procedures for the allocation, tracking, holding, and transfer of SO2 emission allowances for affected sources and units under the Acid Rain Program.	Facility does not operate fossil-fuel-fired electric utilities.
40 CFR 74.1 - 74.61	Sulfur Dioxide OPT-INS		X	Combustion or process sources that are not affected units under 40 CFR 72.6 of this chapter and that are operating and are located in the 48 contiguous States or the District of Columbia may submit an opt-in permit application to become opt-in sources upon issuance of an opt-in permit.	The facility is not regulated under the Acid Rain Program.
40 CFR 75.1 - 75.67	Continuous Emission Monitoring		X	The provisions of this part apply to each affected unit subject to Acid Rain emission limitations or reduction requirements for SO2 or NOx.	The facility is not regulated under the Acid Rain Program.
40 CFR 76.1 - 76.16	Acid Rain Nitrogen Oxides Emissions Reduction Program		X	The provisions apply to each coal-fired utility unit that is subject to an Acid Rain emissions limitation or reduction requirement for SO2 under Phase I or Phase II.	The facility is not regulated under the Acid Rain Program.
40 CFR 77.1 - 77.6	Acid Rain Program: Excess Emissions		X	Sets forth the excess emissions offset planning and offset penalty requirements for affected sources and units under the Acid Rain Program.	Facility does not operate fossil-fuel-fired electric utilities.

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Regulation	Description	Applicable Yes	Applicable No	Description of Applicability	Explanation
40 CFR 82 Subpart A 82.1 - 82.13	Production and Consumption Controls		X	This regulation applies to any person that produces, transforms, destroys, imports, or exports a controlled ozone depleting substance (Class I - Group I and II substances) or imports a controlled product (Class I and II substances). This regulation does not apply to chemical manufacturing processes, resulting from unreacted stock, in which there is inadvertant or coincidental creation of insignificant quantities of a controlled substance; or an unintended byproduct of research and development applications	The facility does not produces, transforms, destroys, import or exports a controlled ozone-depleting substance.
40 CFR 82 Subpart B 82.30 - 82.42	Servicing of Motor Vehicle Air Conditioners	X		These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner, defined as mechanical vapor compression refrigeration equipment used to cool the driver's compartment of any motor vehicle (not including hermetically sealed refrigeration systems used on motor vehicles for refigerated cargo and the air conditioning systems on passenger buses using HCFC-22 refrigerant). This applies to facilities that service motor vehicles on-site.	The facility services motor vehicles air conditioners.
40 CFR 82 Subpart C 82.60 - 82.86	Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances		X	These regulations apply to sellers or distributers of nonessential products containing chlorofluorocarbons; such as plastic party streamers, cleaning fluid for electronic and photographic equipment, solvent sprays, and home and car intruder alarms; in interstate commerce.	Facility does not distribute CFC containing products.
40 CFR 82 Subpart E 82.100 - 82.124	The Labeling of Products Using Ozone-Depleting Substances		X	This requirement applies to all manufacturers and sellers of all Class I and II containing substances. The regulation requires the labelling of containers and products containing or manfactured with Class I or II substances.	Facility does not distribute ozone depleting substances.
40 CFR 82 Subpart F 82.150 - 82.166	Recycling and Emissions Reduction	X		This requirement applies to any person servicing, maintaining, disposing, or repairing appliances; defined as any device containing and using Class I or II substances used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer; except for motor vehicle air conditioners. This part includes refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. This applies to facilities that service, maintain, dispose, or repair appliances on-site. This rule also applies to refrigeration equipment with process leaks; defined as a loss of more than 35% of total refrigerant loss for industrial and commercial refrigerant processes within a 12 month period, or refrigeration systems containing more than 50 lbs of refrigerant lossing 15% of total refrigerant charge within a 12 month period.	The facility disposes of appliances containing ozone-depleting substances.
40 CFR 82 Subpart G 82.170 - 82.184	Significant New Alternatives Policy Program	X		This regulation applies to the producers of substitutes to replace Class I and II ozone depleting substances.	Facility must use approved substitutes for ozone-depleting substances.

EXHIBIT E-2

STATE REGULATORY APPLICABILITY REVIEW

Exhibit E-2
State Regulatory Applicability Review - Facility
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Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -004 .030	Permits: General Prohibitions			X	Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by FDEP, unless the source is exempted.	Facility is a regulated source of air pollutants.
62 -004 .040	Permits: Exemptions	X			Structural changes which will not change the quality, nature or quantity of contaminant emissions or will not cause pollution. Existing or proposed installations which FDEP shall determine will not cause the issuance of contaminants in sufficient quantity as to contribute significantly to the pollution problems of Florida. Exemptions shall be made in writing and filled by FDEP as public record.	There are exemptable activities at the facility for which the facility will exercise this rule.
62 -004 .050 (1)	Permits: Procedure to Obtain Permits - Application Form	X			Applications for permits must be submitted on FDEP forms.	Facility will use FDEP form to apply for permits for new or modified sources.
62 -004 .050 (2)	Permits: Procedure to Obtain Permits - Filing in Quadruplicate	X			Applications and supporting documentation must be filed with FDEP in quadruplicate (4 copies).	Facility will submit FDEP application forms in quadruplicate.
62 -004 .050 (3)	Permits: Procedure to Obtain Permits - P.E. Certification	X			Applications and supporting documentation for a permit must be certified by a professional engineer registered in the State of Florida	Application will be certified by a P.E. registered in Florida.
62 -004 .050 (4)	Permits: Procedure to Obtain Permits - Processing Fees	X			Processing fees for air pollution source construction permits shall be based on potential emissions. There is no processing fee for an air operation permit for a major source, but there are processing fees for minor sources.	Facility will pay appropriate fees for construction permit applications. No fee is required Title V air operating permit.
62 -004 .050 (5) - (8)	Permits: Procedure to Obtain Permits - Application	X			Submittal of an application or substantial modification must be accompanied by the application fee.	Facility will pay appropriate fees for construction permit applications, but no fees are required for Title V operating permit applications.
62 -004 .055	Permits: Permit Processing			X	A timetable is established by FDEP for processing permit applications. This timetable is not applicable for permitting for which there are other specific procedures.	Action required by state agency. Facility will respond in a timely manner to any requests for information made by FDEP.
62 -004 .060	Permits: Consultation	X			The applicant is encouraged to consult with FDEP prior to submittal of a permit application or at any time during the permit processing.	Facility will consult with FDEP during application process.
62 -004 .070	Permits: Standards for Issuing or Denial			X	A permit will be issued if the applicant can provide FDEP with reasonable assurances that the permitted activity will not cause pollution in contravention with FDEP standards.	Action required by state agency.

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Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -004 .080 (1)	Permits: Modification of Permit Conditions - FDEP modification				For good cause and after notice, FDEP may modify a permit.	Action required by state regulatory agency
62 -004 .080 (2) - (3)	Permits: Modification of Permit Conditions - Facility Modification		X		A permittee may request a modification or an extension of a permit by applying to FDEP in writing before the expiration of the permit.	Facility is not currently applying for a permit modification, but may exercise this option in the future.
62 -004 .090	Permits: Renewals		X		The permittee must apply for a renewal of an existing permit at least 60 days prior to expiration of the current permit.	Facility is not currently applying for an air permit renewal, but this rule will apply in the future.
62 -004 .100	Permits: Suspension and Revocation			X	The following are grounds for suspension or revocation of a permit: • Submittal of false or inaccurate information in a permit application or operational report • Violation of a law, FDEP rule or permit condition • Failure to submit operational reports or other required information • Refused lawful inspection	Action required by the state regulatory agency.
62 -004 .110	Permits: Financial Responsibility	X			FDEP may require an applicant to submit proof of financial responsibility and may require the applicant to post a bond to guarantee compliance.	Facility may be required to show financial responsibility and post a bond to guarantee compliance.
62 -004 .120	Permits: Transfer of Permits		X		Permits are transferable if the new permittee can provide reasonable assurances that conditions of the permit will be met. Within 30 days after the sale or legal transfer, a permitted facility must submit to FDEP an Application for Transfer of Permit (Form 62-1.20)1).	This facility is not currently applying for a permit transfer, but may exercise this option in the future.
62 -004 .130	Permits: Plant Operation - Problems	X			The permittee must immediately notify FDEP if unable to comply with conditions of the permit due to breakdown of equipment or destruction by hazard.	Facility will notify FDEP of any unpermitted operational occurrences.
62 -004 .150	Permits: Review			X	A request for an administrative hearing must be made within 14 days of receipt of notice of a proposed or final agency action on a permit application or the right to an administrative hearing is waived.	Applies to the facility. However, on administrative hearing is not currently reported.
62 -004 .160	Permits: Permit Conditions			X	All permits issued by FDEP shall include 17 general conditions.	Florida will include 17 general conditions in permit.
62 -004 .210	Permits: Construction Permits		X		A construction permit is required prior to construction or installation of any source of pollution.	This facility is currently permitting existing sources in a Title V permit, but may apply for a construction permit in the future.

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Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -004 .220	Permits: Operation Permits for New Sources		X		In addition to the requirements for an operation permit, an application for an operation permit of a new source must include the appropriate fee, the certification that construction was complete, and any required test results.	This facility is not a new source, but will apply for an operating permit for any new sources or modifications to the facility.
62 -202 .100	Small Business Assistance Program: Scope and Purpose		X		NO ACTION REQUIRED BY FACILITY. Establishes procedures for notifying small business stationary air pollution sources of their rights and to assure the opportunity for public comment on any petition filed by any air pollution source seeking inclusion in the small business assistance program as a small business stationary air pollution source.	The owner of the facility does not qualify as a small business.
62 -202 .300 (1)	Small Business Assistance Program: Notification of Rights		X		NO ACTION REQUIRED BY FACILITY. The department shall provide notice to small business stationary sources rules related to air pollution proposed by the department and published in the FAC. Each notice shall contain: (a) subject matter of rule; (b) publication date; (c) effective date; (d) FAC location by volume and page number, (e) program hotline telephone number.	The owner of the facility does not qualify as a small business.
62 -202 .300 (2)	Small Business Assistance Program: Notification of Rights		X		The department shall provide notice to small business stationary sources, which are Title V sources, of any requirements of Chapter 62-213, FAC.	The owner of the facility does not qualify as a small business.
62 -202 .400 (1)	Small Business Assistance Program: Public Notice and Comment - Department List of SBAPS		X		The department shall create and maintain a list of interested entities to receive notices identified in Rule 62-202.300(1), FAC. The department shall identify all minor sources and other sources that qualify as small business stationary sources. Sources desiring consideration as a small business stationary source are required to provide the department with information listed in this rule.	The owner of the facility does not qualify as a small business.
62 -202 .400 (2)	Small Business Assistance Program: Public Notice and Comment - Petition for Inclusion of Department SBAPS List		X		The program shall create and maintain a list of interested entities to receive notices identified in Rule 62-202.300(1), FAC. Any stationary source may petition for inclusion on the list. Petitioning sources must publish notice of such petition in a newspaper of general circulation in each county in which the source operates.	The owner of the facility does not qualify as a small business.
62 -202 .400 (3)	Small Business Assistance Program: Public Notice and Comment - Department Notification to Of SBAPS Petition Status		X		The program shall create and maintain a list of interested entities to receive the notices identified in Rule 62-202. 300(1), FAC. The program shall notify each source petitioning that the responding source does or does not conform to the definition of a small business stationary assistance program source. Any person who has provided the department with comments shall also receive a written notice of the determination.	The owner of the facility does not qualify as a small business.

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62 -202 .400 (4)	Small Business Assistance Program: Public Notice and Comment - Department Revision of SBAPS List		X		The program shall create and maintain a list of interested entities to receive the notices identified in Rule 62-202.300(1), FAC. The department shall include in the list each source which has submitted a petition and which the department determined conforms to the definition of a small business stationary source.	The owner of the facility does not qualify as a small business.
62 -202 .400 (5)	Small Business Assistance Program: Public Notice and Comment - Annual SBAPS List Maintained By Department		X		The program shall create and maintain a list of interested entities to receive the notices listed in Rule 62-202.300(1), FAC. The department shall maintain the list annually, and shall delete from the list sources requesting deletion or sources for which the departments notice has been returned as not deliverable.	The owner of the facility does not qualify a. a small business.
62 -204 .100 (2)	Air Pollution Control: Purpose and Scope			X	The chapter designates all areas of the state as attainment, nonattainment, or unclassifiable with respect to each pollutant for which ambient air quality standards have been adopted. Also designates air quality maintenance areas and classifies all areas of the state for determining which set of PSD increments apply. The chapter also sets procedures for redesignating and reclassifying areas.	Standards, air quality area designations, and public notice requirements specified in this chapter apply to the facility.
62 -204 .220 (1)-(2)	Air Pollution Control - General: Ambient Air Quality Models - Department Not To Issue Permits Resulting in Violation of NAAQS			X	Except as provided in 62-212.400, FAC, (PSD), 62-212.500, FAC, (NSR), or 62-296, FAC, (RACT), the Department shall not issue an air permit authorizing a person to build, erect, construct, or implant any new emission unit; operate, modify, or rebuild any existing emission unit; or by any other means release or take action which would result in the release of an air pollutant into the atmosphere which would cause or contribute to a violation of an ambient air quality standard established under 62-204.240, FAC.	Action required by the state regulatory agency.
62 -204 .220 (3)	Air Pollution Control - General: Ambient Air Quality Models - Ambient Air Quality Monitors		X		Ambient air quality monitors used to establish a violation of an ambient air quality standard shall meet the requirements of 40 CFR Part 58, adopted and incorporated by reference in rule 62-204.800, FAC.	The facility is located in an attainment area and ambient air monitoring is not required.
62 -204 .220 (4)	Air Pollution Control - General: Ambient Air Quality Models		X		When required, all estimates of concentrations of pollutants in the ambient air shall be based on the applicable air quality models, data bases, and other requirements approved by FDEP and specified in 40 CFR Part 51, Appendix W - Guideline on Air Quality Models (Revised), adopted and incorporated by reference in Rule 62-204.800, F.A.C. Any substitution shall be approved in writing by FDEP and the Administration of EPA, and shall be subject to the public comment procedures.	Facility is not required to conduct air quality modeling as part of preconstruction review for this application, but may conduct modeling in the future.

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62 -204 .240 (1)-(6)	Ambient Air Quality Standards: SO2, PM10, CO, O3, NO2, and Lead			X	Ambient air quality standards for SO2, PM10, CO, Ozone, NO2, and Lead are provided.	Ambient air quality standard for SO2, NO2, PM10, CO, O3, Pb.
62 -204 .260 (1)-(3)	Ambient Air Quality Standards: Prevention of Significant Deterioration Increments			X	At each point within the baseline area, any increase in pollutant concentration over the baseline concentration shall be limited to the applicable amount specified in 40 CFR51.166(c), and as set forth in this rule. Increments are listed for PM10, SO2, and NOx for Class I, Class II, and Class III Areas.	Facility is prohibited from exceeding allowable increase in ambient pollutant concentration over baseline levels.
62 -204 .320 (1)(a)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - Attainment, Nonattainment, or Unclassifiable			X	All areas of the state shall be designated as attainment, nonattainment or unclassifiable with respect to each air pollutant for which an ambient air quality standard is established under Rule 62-204.240, F.A.C. The designation of each such area determines which emission limiting standards, new and modified facility review requirements, and other air pollution control measures shall apply to sources and activities which emit the pollutant or the precursor of the pollutant for which the area is designated.	Action required by regulatory agency.
62 -204 .320 (1)(b)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - PSD Areas			X	All areas of the state that are not designated as nonattainment with respect to a pollutant for which a maximum allowable increase is defined as Rule 62-204.260, F.A.C., shall be designated as one or more prevention of significant deterioration (PSD) areas with respect to each such pollutant. The designation of a PSD area determines the area for which a PSD baseline date shall be established.	Action required by regulatory agency.
62 -204 .320 (1)(c)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - Classification of PSD Areas			X	All areas of the state shall be designated as Class I, Class II, or Class III. For an area that is designated as a PSD area, the designation of the area as Class I, II, or III determines which set of maximum allowable increases in PM, SO2, and NO2 concentrations established under Rule 62-204.260, F.A.C., shall apply in the area after a PSD baseline date is established.	Action required by regulatory agency.
62 -204 .320 (1)(d)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - Air Quality Maintenance Areas			X	Certain areas of the state shall be designated as air quality maintenance areas. Areas that have been redesignated from nonattainment to attainment or unclassifiable may be designated as air quality maintenance areas.	Action required by regulatory agency.

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62 -204 .320 (2)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - Nonattainment, Attainment, and Unclassifiable Areas (Reserved)			X	This section is reserved.	Action required by regulatory agency.
62 -204 .320 (3)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - Class I, Class II, and Class III Areas			X	Reclassification of Class I, Class II, and Class III areas may be proposed by filing a petition for rulemaking with the ERC showing sufficient justification for such action. Rule lists criteria for reclassification, areas not to be reclassified as Class III, and areas that can be reclassified as Class III.	Action required by regulatory agency.
62 -204 .320 (4)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - PSD Areas			X	Designation or redesignation of PSD areas may be proposed by filing a petition for rulemaking with the ERC. PSD areas to be designated only for pollutant with maximum allowable increases established under 62-204.260, FAC. PSD area may not be redesignated if such change would result in violation of maximum allowable increase in proposed area. Procedures for redesignation are listed in this rule.	Action required by regulatory agency.
62 -204 .320 (5)	Air Pollution Control: Procedures for Designation and Redesignation of Areas - AQM Areas (Reserved)			X	This section is reserved.	Action required by regulatory agency.
62 -204 .340 (1)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Attainment Areas			X	All of the state is designated as attainment unless specifically designated as nonattainment in 62-204.340(2) F.A.C. or as unclassifiable in 62-204.340(3) F.A.C.	Orange County is designated as attainment for all pollutants.
62 -204 .340 (2)(a)-(f)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Ozone, PM10, SO2, CO, NO2, and lead Nonattainment Areas		X		These sections are reserved.	Orange County is not a nonattainment area for any pollutant.
62 -204 .340 (3)(a)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Areas Unclassifiable for PM10			X	All of the state except those areas designated as nonattainment under 62-204.340(2)(b) F.A.C. is designated as unclassified for PM10.	Orange County is designated as unclassifiable for PM10

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62 -204 .340 (3)(b)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Areas Unclassifiable for SO2		X		The following areas are designated as unclassifiable for the pollutant sulfur dioxide: Duval County, Escambia County, Hillsborough County, and the Southwest corner of Pasco County.	Orange County is not an unclassifiable area for SO2.
62 -204 .340 (4)(a)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Air Quality Maintenance Areas for Ozone			X	Each of the following areas is designated as an air quality maintenance area for the air pollutant ozone: Orange County, Duval County, Hillsborough and Pinellas counties, and Broward, Dade, and Palm Beach counties.	Orange County is designated as an air quality maintenance area for ozone.
62 -204 .340 (4)(b)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Air Quality Maintenance Areas for PM		X		Each of the following areas is designated as an air quality maintenance area for the air pollutant, PM: (1) That portion of Hillsborough County which falls within the area of the circle having a centerpoint at the intersection of U.S. 41 South and State Road 60 and a radius of 12 kilometers; (2) The downtown Jacksonville area in Duval County located within the following boundary lines: south and then west along the St. Johns River from its confluence with Long Branch Creek, to Main Street; north along Main Street to Eighth Street; east along Eight Street to Evergreen Avenue; north along Evergreen Avenue to Long Branch Creek; and east along Long Branch Creek to the St. Johns River.	Orange County is not an air quality maintenance area for PM.
62 -204 .340 (4)(c)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Air Quality Maintenance Area for Pb		X		Hillsborough County in the area encompassed within a radius of five kilometers centers at UTM coordinates: 364.0 kilometers East, 3093.5 kilometers North, zone 17.	Orange County is not an air quality maintenance area for lead.
62 -204 .340 (4)(d)	Air Pollution Control: Designation of Attainment, Nonattainment, and Maintenance Areas - Public Notice Procedures			X	As soon as practicable after notice of redesignation is published by EPA in the Federal Register, FDEP shall publish notice of the effective date of redesignation in the Florida Administrative Weekly and a newspaper of general circulation in each county affected by the redesignation.	Action required by federal and state regulatory agencies.
62 -204 .360 (1)-(3)	Air Pollution Control: Designation of Prevention of Significant Deterioration (PSD) Areas - PM, SO2, and NO2			X	All of the state is designated as PSD areas for the air pollutants PM, SO2, and NO2. The PM and SO2 minor source baseline date is December 27, 1977. The NO2 minor source baseline date established is March 28, 1988.	Orange County is designated as PSD for TSP, SO2, and NO2.

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62 -204 .360 (4)-(5)	Air Pollution Control: Designation of Prevention of Significant Deterioration (PSD) Areas - Class I, II, and III			X	Class I Areas: Everglades National Park, Chassahowitzka National Wilderness Area, St. Marks National Wilderness Area, Bradwell Bay National Wilderness Area, Okeefenokee National Wilderness Area (outside Florida but within 100 km), and Wolf Island National Wilderness Area (outside Florida but within 100 km). All other areas of Florida are designated Class II.	This facility is located in a Class II area.
62 -204 .400	Air Pollution Control - General Provisions: Public Notice and Hearing Requirements for State Implementation Plan Revisions			X	The department shall hold a public hearing prior to adoption of any proposed revision to the Florida State Implementation Plan (SIP). Notice of the proposed revisions will be provided to EPA and the local air pollution control agencies. Record of the hearing, including a list of witnesses shall be made available to the administrator upon request. The department shall include with each SIP revision submitted to EPA a certification that the hearing was held in accordance with the notice required by 62-204.400(1), FAC.	Action required by the state agency.
62 -204 .500	Air Pollution Control: Conformity			X	The provisions of general conformity apply to state review of all federal general conformity determinations submitted to the state pursuant to 40 CFR 51, Subpart W. The department shall carry out its responsibilities for transportation conformity pursuant to the "Memorandum of Agreement Implementing the Conformity Criteria and Consultation Procedures - Revision to the Florida State Implementation Plan Pursuant to the Clean Air Act Amendments of 1990."	Action required by the state agency.
62 -204 .800 (1)-(19)	Air Pollution Control: Federal Regulations Adopted By Reference			X		The state agency adopts Federal regulations by reference. No action required by facility.
62 -210 .100	Stationary Sources: Purpose and Scope	X			General requirements are established in this chapter for stationary sources of pollutant emissions, including criteria for determining the need for obtaining an air construction or air operation permit. Rule includes public notice requirements, requirements for estimating emission rates and using air quality models, special provisions related to compliance monitoring, stack heights, circumvention of pollution prevention control equipment, and excess emissions.	Facility is applying for a Title V operating permit and may apply for construction permits or operating permit modifications in the future.

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62 -210 .300 (1)	Stationary Sources - General: Permits Required - Air Construction Permits		X		An air construction permit must be obtained for any proposed new or modified source prior to the beginning of construction or modification, in accordance with all applicable provisions of this chapter, Chapter 62-212, and Chapter 62-4, FAC. The construction permit shall be issued for a period sufficient to allow construction or operation of the source and operation of the source while it is conduction tests or demonstrating compliance with conditions in the construction permit.	Facility is not applying for a construction permit.
62 -210 .300 (2)(a)	Stationary Sources - General: Permits Required - Air Operation Permit Minimum Requirements	X			An air operation permit is required upon expiration of an operating permit for an existing source, or subsequent to construction or modification and demonstration of compliance with any conditions of the construction permit for any new or modified source, or as required by Title V.	Facility is applying for a Title V operating permit to document and permit existing sources.
62 -210 .300 (2)(b)	Stationary Sources - General: Permits Required - Additional Requirements for Federally Enforceable Operation Permits for Non-Title V Sources		X		An operation permit for a non-Title V source, including synthetic non-Title V source, shall be considered federally enforceable only if it is issued, renewed, or revised in accordance with the following provisions: (1) at time of initial application, applicant requests permit be made federally enforceable; (2) a notice of proposed agency action on the application is published in accordance with 62-210.350(1) and (4), FAC; (3) the permit is a facility-wide permit; (4) the permit is conditioned such that the owner or operator is legally obligated to adhere to the terms and limitations of the permit; (5) the permit is conditioned such that any emissions limitations,. control requirements, or other requirement assumed by the owner upon acceptance of the permit shall be quantifiable and enforceable as a practical matter. Once a synthetic non-Title V source has been issued a federally-enforceable operation permit, it shall remain subject to the requirements of rule 62-210.300(2)(b), FAC, unless the owner accepts a higher limit and the facility becomes a Title V source, or the owner demonstrates that it no longer needs a federally enforceable operation permit to be classified as a non-Title V source.	Facility is applying for a Title V air operating permit.

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62 -210 .300 (3)(a)	Stationary Sources - General: Permits Required - Full Exemptions	X			A list of 29 types of emissions units is provided in the rule, granted full exemption from air permitting requirements. The emissions units shall be exempt from the permitting requirements of this chapter and Chapter 62-4, FAC; provided, that exempt emissions units shall be subject to any applicable emission limiting standards and that the emissions from exempt emissions units or activities shall be considered in determining whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under this rule are also exempt from Title V permitting requirements, provided the emissions units also meet the exemption criteria of 62-213.430(6)(b), FAC.	Several small processes at the facility qualify for full exemption from permitting.
62 -210 .300 (3)(b)	Stationary Sources - General: Permits Required - Temporary Exemptions		X		Except for an emission unit subject to any applicable regulation or permitting requirement under PSD or nonattainment area preconstruction review, NSPS, NESHAPs, NESHAPs for Source Categories, BACT, or RACT requirement; an emission unit described in a timely and complete Title V application, and not subject to an existing valid air permit; shall be exempt from the permitting requirements of this chapter, Chapter 62-4, and 62-212.300, FAC, until a final determination on a permit application under Chapter 62-213, FAC, is made. No emission unit shall be exempt if it causes or contributes to a significant net emissions increase, triggers preconstruction review, or if it is constructed or modified, as defined in 62-212.200, FAC, subsequent to November 23, 1994. Any applicant exercising this option shall notify the department.	Facility is subject to NSPS, so this provision does not apply to the facility as a whole.
62 -210 .300 (3)(c)	Stationary Sources: Permits Required - Conditional Exemptions From Title V Air Permitting		X		A list of facilities is provided in the rule that are exempt from the requirement to obtain a Title V air operating permit, but are not exempt from the requirement to obtain any other air permit as may be required by this rule. A facility is not entitled to an exemption under this rule if it is a Title V source pursuant to paragraph (f), (g), or (h) of the definition of a "major source of air pollution" or if it contains other emission units which would cause the facility to be classified as a Title V source as a result of their combined potential to emit regulated pollutants. The list includes the following facilities meeting qualifying criteria: asphalt concrete plants, bulk gasoline plants, facilities comprising heating units and general purpose internal combustion engines, and facilities comprising surface coating operations.	Facility is not eligible to obtain a conditional exemption from Title V permitting.

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62 -210 .300 (4)(a)	Stationary Sources: Permits Required - Facilities Eligible for Air General Permits		X		The following facilities are entitled to operate under the terms of an air general permit issued pursuant to Chapter 62-4.530 and 62-4.540, FAC, provided all existing air permits authorizing operation of the facility are surrendered: (1) volume reduction, mercury recovery, and mercury reclamation processes; (2) bulk gasoline plants; (3) facilities comprising heating units and general purpose internal combustion engines; and (4) facilities comprising surface coating operations. These facilities must submit a completed air general permit notification form to the department (DEP Form 62-210.920, FAC).	Facility is not eligible to obtain a conditional exemption from Title V permitting, and connot obtain an air general permit.
62 -210 .300 (4)(b)	Stationary Sources - General: Permits Required - Air General Permits for Certain Listed Facilities		X		Certain facilities are eligible to operate under the terms of an air general permit issued pursuant to the procedures and general conditions of 62-213.300, FAC, Title V General Air Permits.	Facility is not eligible to obtain a conditional exemption from Title V permitting, and connot obtain an air general permit.
62 -210 .300 (4)(c)	Stationary Sources - General: Permits Required - Air General Permit Requirements		X		The owner of any facility eligible for an air general permit and who has submitted notification according to 62-210.300(4)(a), FAC, shall not be required to obtain an air operation or air construction permit.	Facility is not eligible to obtain a conditional exemption from Title V permitting, and connot obtain an air general permit.
62 -210 .300 (4)(d)	Stationary Sources - General: Permits Required - Air General Permit Noncompliance		X		If the owner of any facility operating under an air general permit does not comply with or will not be able to comply with any condition or limitation of the permit, the permittee shall immediately provide the department with the following information: description and cause of noncompliance; and period of noncompliance, including dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue and the steps being taken to correct it.	Facility is not eligible to obtain a conditional exemption from Title V permitting, and connot obtain an air general permit.
62 -210 .300 (5)	Stationary Sources - General: Permits Required - Notification of Startup		X		The owner of any emissions unit or facility which has a valid air operation permit and which has been shut down for more than one year, shall notify the department in writing of the intent to startup such emissions unit or facility, a minimum of 60 days prior to the intended startup date. The owner is required to provide specific information listed in rule, but may provide notification as soon as possible before startup if an emergency situation arises.	Facility has not been shut down for a period of more than one year and is not currently starting up its operations.
62 -210 .300 (6)	Stationary Sources - General: Permits Required - Emissions Unit Reclassification		X		Any emissions unit whose operation permit has been revoked or whose permit to operate has expired without timely renewal or transfer.	Facility is applying for a first-time Title V air operating permit. No previous permit has been revoked or expired.

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62 -210 .350 (1)	Stationary Sources - General: Public Notice and Comment - Public Notice of Proposed Agency Action	X			A notice of proposed agency action on permit application shall be published by any applicant for a construction permit for any proposed new or modified facility or emissions unit; operation permit, permit renewal, or permit revision for any minor source of emissions; or operation permit, permit renewal, or permit revision for any major source of emissions.	Facility is required to publish a public notice of proposed agency action on the permit application prior to issuance.
62 -210 .350 (2)	Stationary Sources - General: Public Notice and Comment - Additional Public Notice Requirements for Emissions Units Subject to PSD or NAA Preconstruction Review		X		Before taking final agency action to issue a new or modified facility or emissions unit subject to preconstruction review, FDEP shall comply with all applicable provisions and provide an opportunity for public comment which shall include as a minimum the following: (1) A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records, and the departments analysis of the effect of the proposed construction on ambient air quality, including the department's determination of whether the permit should be approved or disapproved; (2) A 30-day period for submittal of public comments.; and (3) A notice, by advertisement in a newspaper of local circulation in the county affected, specifying the nature and location of the proposed facility, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1 above; and notifying the public of the oppurtunity for submitting comments and requesting a public hearing.	Facility will not undergo PSD or NSR preconstruction review.
62 -210 .350 (3)	Stationary Sources - General: Public Notice and Comment - Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources	X			Before taking final agency action to issue a new, renewed, or revised Title V air operation permit, FDEP shall comply with all applicable provisions and provide an opportunity for public comment which shall include as a minimum the following: ,·,A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records. ,·,A 30-day period for submittal of public comments. The notice shall be prepared by the FDEP and published by the applicant no later than 30 days prior to final agency action. The notice shall identify: (1) the facility; (2) name, address, and phone number of the department; (3) activity/ies involved in the permit action; (4) emissions change involved in the permit action; (5) name, address, and phone number of a department representative from whom interested persons may obtain additional information; (6) a brief description of the comment procedures; (7) procedures by which persons may petition the administrator to object the issuance of the proposed permit.	Facility must comply with public notice requirements of this rule.

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62 -210 .350 (4)	Stationary Sources - General: Public Notice and Comment - Additional Public Notice Requirements for Facilities Subject to Federally-Enforceable Non-Title V Operation Permits		X		Before taking final agency action to issue a new, renewed, or revised air operation permit pursuant to Chapter 62-210.300 (2)(b), FAC, FDEP shall comply with all applicable provisions of 62-103.150, FAC, and provide an opportunity for public comment which shall include as a minimum the following: (1) A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records; (2) A 30-day period for submittal of public comments; and (3) A notice, in a newspaper of general circulation in the county affected, containing the information specified in 62-210. 350(4)(c), FAC. The notice shall be prepared by the FDEP and published by the applicant no later than 30 days prior to final agency action. The notice shall identify: (1) the facility; (2) name, address, and phone number of the department; (3) activity/ies involved in the permit action; (4) emissions change involved in the permit action; (5) name, address, and phone number of a department representative from whom interested persons may obtain additional information; (6) a brief description of the comment procedures; (7) procedures by which persons may petition the administrator to object the issuance of the proposed permit. A copy of the notice shall be sent to EPA and any local air pollution control agency having cognicance over the affected county. The proposed permit, public comments, and final permit shall be available at the local agency for public inspection.	
62 -210 .360	Stationary Sources - General: Administrative Permit Corrections			X	A facility owner shall notify FDEP by letter of minor corrections to information contained in a permit. Such notifications shall include: Typographical errors noted in the permit; Name, address or phone number change from that in the permit; Any other similar minor administrative change at the source; A change requiring more frequent monitoring or reporting by the permittee. Upon receipt of such notifications, FDEP shall within 60 days correct the permit and provide a corrected copy to the owner. For Title V facilities, a copy shall be provided to EPA and the local air pollution control agency. The department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, FAC, if the construction permit revisions incorporate requirements of federally-enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of 62-213.430(1), FAC, be complied with in conjuction with the processing of the construction permit application.	Facility will notify FDEP of any administrative permit corrections in writing.

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		Yes	No	Applies But No Action Required		
62 -210 .370 (1)	Stationary Sources - General: Reports - Notification of Intent to Relocate Air Pollutant Emitting Facility		X		An air permit for a relocatable facility must be amended upon change of location of the facility. The owner or operator of the facility must submit a Notification of Intent to Relocate Air Pollutant Emitting Facility (DEP Form 62-210.900(3), FAC) to the department within 7 days of the change, if the facility would be relocated to a county in which public notice of the proposed operation of the facility had been given within the previous 5 years pursuant to 62-210.350(1), FAC. or otherwise 30 days prior to the change.	This facility is not relocating.
62 -210 .370 (3)	Stationary Sources - General: Reports - Annual Operating Reports for Air Pollutant Emitting Facility	X			The Annual Operating Report (AOR) for Air Pollutant Emitting Facility (DEP Form 62-210.900(5), FAC) shall be completed for the following facilities: (1) all Title V sources; (2) all synthetic non-Title V sources; (3) all facilities with the potential to emit 10 tpy VOCs or 25 tpy or more of Nox and located in an ozone nonattainment area or ozone air quality maintenance area; (4) all facilities for which an annual operating report is required by rule or permit. No AOR is required for any facility operating under an air general permit.	Facility will submit AORs to FDEP Central District for its regulated emissions units.
62 -210 .550 (1)-(3)	Stationary Sources - General: Stack Height Policy	X			The degree of emission limitation required of any source for control of any air pollutant on a continuous basis shall not be affected by so much of any source's stack height that exceeds good engineering practice or by any dispersion technique. This provision does not apply to stacks in existence or air dispersion techniques implemented on or before December 31, 1970, except where pollutants are being emitted from such stacks or dispersion techniques by emissions units, as defined in Section 111(3)(a) of the Clean Air Act, which were constructed, or reconstructed, or for which modifications under rule 62-212.400, 62-212.500, 17-2.17 (repealed), 17-2.500 (transferred), 17-2.510 (transferred), or 40 CFR 52.21, were carried out after December 31, 1970.	Applies to point sources at the facility.
62 -210 .650	Stationary Sources - General: Circumvention	X			No person shall circumvent any air pollutant control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.	Circumvention of air pollution control devices prohibited.
62 -210 .700 (1)	Stationary Sources - General: Excess Emissions - Startup, Shutdown, or Equipment Malfunctions		X		Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period.	Facility does not operate any combustion sources that produce excess emissions during startup, shutdown, or malfunction.

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62 -210 .700 (4)	Stationary Sources - General: Excess Emissions Resulting from Poor O&M Prohibited		X		Excess emissions due to poor operation and maintenance or preventable equipment failure are prohibited.	Facility does not operate any combustion sources that produce excess emissions during startup, shutdown, or malfunction.
62 -210 .700 (5)	Stationary Sources - General: Excess Emissions - FDEP Adjustment of Maximum and Minimum Levels Considering Operational Variation			X	Considering operational variations in industrial equipment, FDEP may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.	Action required by state regulatory agency.
62 -210 .700 (6)	Stationary Sources - General: Excess Emissions - Notification of Equipment Malfunction to FDEP		X		In case of excess emissions from malfunctions, each owner or operator shall notify FDEP or the local program in accordance with 62-4.130, FAC. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by FDEP.	Facility does not operate any combustion sources that produce excess emissions during startup, shutdown, or malfunction.
62 -210 .900 (1)-(5)	Stationary Sources - General: Forms	X			(1) Application for Air Permit - Long Form, Form and Instructions; (2) Application for Air Permit - Short Form, Form and Instructions; (3) Notification of Intent to Relocate Air Pollutant Emitting Facility, Form and Instructions; (4) Notification of Intent to Construct Air Pollution Control Equipment, Form and Instructions; (5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.	Facility will file application using FDEP form 62-210.900(1).
62 -210 .920 (1)-(4)	Stationary Sources - General: Notification Forms for Air General Permits		X		(1) Volume Reduction, Mercury Recovery or Mercury Reclamation Air General Permit Notification Form; (2) Bulk Gasoline Plant Air General Permit Notification Form; (3) Heating Units and General Purpose Internal Combustion Engines Air General Permit Notification Form; (4) Surface Coating Operations Air General Permit Notification Form.	Facility is not eligible to obtain a conditional exemption from Title V permitting and is not submitting an air general permit notification.
62 -212 .100	Stationary Sources - Preconstruction Review: Purpose and Scope		X		FDEP adopts this chapter to establish the preconstruction review requirements for proposed new emissions units or facilities and proposed modifications. The requirements of this chapter apply to those proposed activities for which an air construction permit is required pursuant to Chapter 62-210, FAC. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to prevention of significant deterioration (PSD) and nonattainment-area (NAA) preconstruction review. It also includes preconstruction review requirements applicable to specific emissions unit types.	Facility is not applying for an air construction permit, and, therefore, is not subject to preconstruction review.

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		Yes	No	Applies But No Action Required		
62 -212 .300 (1)-(3)	Stationary Sources - Preconstruction Review: General Preconstruction Review Requirements		X		The general preconstruction review requirements of this rule shall apply in addition to the applicable requirements under rules 62-212.400 or 62-212.500, FAC. Pollutants subject to general preconstruction review requirements of this rule are those pollutants not subject to preconstruction review under 62-212.400 or 62-212.500, FAC.	Facility is not applying for an air construction permit, and, therefore, is not subject to preconstruction review.
62 -212 .400 (1)-(9)	Stationary Sources - Preconstruction Review: Prevention of Significant Deterioration (PSD)		X		The preconstruction review requirements of this rule include the applicable provisions of Chapters 62-212.400(4), (5), and (6), FAC, as modified by Chapter 62-212.400(3), FAC. A proposed new or modified facility that is not subject to the provisions of this rule, either in whole or in part, may be subject to review requirements under other rules of this chapter. (A) Facility and Project Exemptions include the following: (1) Nonprofit Health and Educational Facilities; (2) Pollution Control Project Exemption; (3) Permanent Clean Coal Technology Demonstration Project Exemption; (4) Very Clean-Coal Fired Electric Utility Steam Generating Unit Exemption. (B) Fugitive Emissions Exemption - a proposed new or modified facility shall not be subject to the requirements of this rule if it belongs to one of the major source categories listed in Table 62-212.400-1, FAC, and the facility would be subject to preconstruction review only if fugitive emissions are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to 62-212.400(2)(d)2., FAC, if it were itself a proposed new facility. (C) Alternative Fuel or Raw Material Exemption - a modification that is to occur for any of the following reasons shall not be subject to the preconstruction review requirements of this rule: (1) use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; (2) use of an alternative fuel by reason of an order or rule under Section 125 of the Act; (3) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (4) use of an alternatvie fuel or raw material which the facility was capable of accommodating before Jan 6, 1975; or (5) use of an alternative fuel or raw material which the facility is approved to use under any permit issued under 40 CFR 52.21 or 17-2.500 or 62-212.400, FAC. (D) New and	Facility is not applying for an air construction permit, and, therefore, is not subject to preconstruction review.

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62 -212 .400 (1)-(9) (Continued)					Modified Facilities - (1) A proposed new minor facility shall not be subject to the preconstruction review requirements of this rule; (2) A proposed new major facility shall be subject to the preconstruction review requirements of this rule if the sum of quantifiable fugitive and potential emissions from the source are greater than 250 tpy (100 tpy for any of the major source categories), or 5 tpy lead; (3) A proposed modification to a minor facility shall be subject to the preconstruction review requirements of this rule only if the modification would be a physical change which, in and of itself, would constitute a new major facility subject to the requirements of this rule; and (4) A proposed modification to a major facility shall be subject to the preconstruction review requirements of this rule if the facility to be modified would be subject to the requirements of this rule if it were itself a proposed new facility, or if the modification would result in a significant net emissions increase.	
62-212.500(1)-(8)	Stationary Sources - Preconstruction Review for Nonattainment Areas		X		The department shall not permit the construction or modification of any emissions unit that would cause or contribute to a violation of any ambient air quality standard. The deparment shall insure that the combined impact of new emissions, emissions offsets, temporary emissions, and existing emissions within any nonattainment area or area of influence shall not interfere with reasonable further progress (RFP) toward attainment of ambient air quality standards. (A) Facility and Project Exemptions include the following: a Pollution Control Project Exemption and a Temporary Clean Coal Technology Demonstration Project Exemption. (B) Fugitive Emissions Exemption - a proposed new or modified facility shall not be subject to the requirements of this rule if it belongs to one of the major source categories listed in Table 62-212.400-1, FAC, and the facility would be subject to preconstruction review only if fugitive emissions are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to 62-212.500(2)(d)2., FAC, if it were itself a proposed new facility. (C) Alternative Fuel or Raw Material Exemption - a modification that is to occur for any of the following reasons shall not be subject to the preconstruction review requirements of this rule: (1) use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal	

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		Yes	No	Applies But No Action Required		
62-212.500(1)-(8) (Continued)					Power Act; (2) use of an alternative fuel by reason of an order or rule under Section 125 of the Act; (3) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (4) use of an alternative fuel or raw material which the facility was capable of accommodating before Jan 6, 1975; or (5) use of an alternative fuel or raw material which the facility is approved to use under any permit issued under 40 CFR 52.21 or 17-2.510 or 62-212.500, FAC. (D) New and Modified Facilities - (1) A proposed new minor facility shall not be subject to the preconstruction review requirements of this rule; (2) A proposed new major facility shall be subject to the preconstruction review requirements of this rule if the sum of quantifiable fugitive and potential emissions from the source are greater than 100 tpy, or 5 tpy lead; (3) A proposed modification to a minor facility shall be subject to the preconstruction review requirements of this rule only if the modification would be a physical change which, in and of itself, would constitute a new major facility subject to the requirements of this rule; and (4) A proposed modification to a major facility shall be subject to the preconstruction review requirements of this rule if the facility to be modified would be subject to the requirements of this rule if it were itself a proposed new facility, or if the modification would result in a significant net emissions increase.	
62 -213 .100	Operation Permits for Major Sources of Air Pollution: Purpose and Scope	X				Facility is a major source of air pollution.
62 -213 .205 (1)-(5)	Operation Permits for Major Sources of Air Pollution: Annual Operation Licensing Fees	X			Annual operation licensing fees for Title V facilities must be paid between January 15 and March 1 of each year. Requirements for determining annual emissions fees are included in sections (1) through (5) of this rule.	Facility is a major source of air pollution and must submit annual operation license fees.
62 -213 .300 (1)-(3)	Operation Permits for Major Sources of Air Pollution: Title V Air General Permits		X		The following facilities are eligible to operate under the terms of a Title V air general permit issued pursuant to this rule: (1) perchloroethylene dry cleaning facilities, provided the responsible official submits a completed Perchloroethylene Dry Cleaner Air General Permit Notification Form to the department at least 30 days prior to beginning operation, or by July 1, 1995, whichever is later; (2) Ethylene oxide sterilization facilities (reserved); (3) halogenated solvent degreasing facilities (reserved); and (4) chromium electroplating facilities (reserved).	Facility is not eligible for a conditional exemption from Title V air permitting and is not submitting an air general permit notification form.

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62 -213 .400 (1)	Operation Permits for Major Sources of Air Pollution: Permits and Permit Revisions Required - Effective Date	X			Effective January 2, 1995, all Title V sources are subject to the air operation permit requirements of this chapter, except those Title V sources permittable pursuant to 62-213.300, FAC, Title V Air General Permits. After January 2, 1995, no Title V source may operate except in compliance with this chapter.	Facility will be subject to the permit requirements of Title V, effective January 2, 1995.
62 -213 .400 (2)	Operation Permits for Major Sources of Air Pollution: Permits and Permit Revisions Required - Operational Changes	X			No source with a permit issued under the provisions of this chapter shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the criteria listed in this rule.	Facility is applying for a first-time Title V air operating permit. These provisions will apply upon issuance of the permit.
62 -213 .410	Operation Permits for Major Sources of Air Pollution: Changes without Permit Revision	X			Sources having a valid permit may make the following changes without permit revision, provided that source maintains logs or records to verify periods of operation in each alternative method of operation: (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit; (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if the application complies with 62-213.420(3) and (4), FAC, the terms were subject to federally enforceable preconstruction review pursuant to 62-212, FAC, and the construction permit was issued after the department and the applicant complied with all requirements of 62-213.430(1), FAC; (3) Permitted sources may implement any other operating changes after the source provides FDEP and EPA with at least 7 days written notice prior to implementation; and (4) Permitted sources may implement changes involving modes of operation only in accordance with 62-213.415, FAC.	Facility is required to follow FDEP guidelines for operating within permitted modes.
62 -213 .412 (1)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	Those permitted sources making any change that constitutes a modification, but which would not require EPA preconstruction review, may implement such change prior to final issuance of a permit revision in accordance with this section provided the change satisfies the following criteria: (a) does not violate any applicable requirement; (b) does not contravene any permit term or condition for monitoring, testing, recordkeeping, or reporting, or any complaince certification requirement; (c) does not require or change a case-by-case determination of ambient impacts, or a visibility or increment analysis under the provisions of 62-212, FAC; and (d) does not seek to establish or change a permit term of condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.

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62 -213 .412 (2)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to 62-212, FAC, and after the source provides to EPA, the department, each affected state, and an approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by 62-213.420, FAC, in lieu of submitting separate application forms.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.
62 -213 .412 (3)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	The department shall process the application for operation permit revision in accordance with the provisions of this chapter, except that the department shall issue a draft permit revision or a determination to deny the permit within 60 days receipt of a complete application, or, if the source has submitted a construction permit application conforming to the requirements of 62-213.420, FAC, the department shall issue a draft permit or a determination to deny the revision at the same time the department issues its determination on issuance or denial of the construction permit application. The department shall not take final action until all of the requirements of 62-213.430(1)(a), (c), (d), and (e), FAC, have been complied with.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.
62 -213 .412 (4)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.
62 -213 .412 (5)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	The permit shield described in 62-213.460, FAC, shall not apply to such changes until after the department takes final action to issue the operation permit revision.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.
62 -213 .412 (6)	Operation Permits for Major Sources of Air Pollution: Immediate Implementation Pending Revision Process			X	If the department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.	This facility is not currently making changes to process, but may use this rule in the future to determine if planned changes require permitting.
62 -213 .413 (1)-(5)	Operation Permits for Major Sources of Air Pollution: Fast-Track Revisions of Acid Rain Parts		X		Those acid rain sources making a change described at 62-214.370(4), FAC, may request such a change as provided in this rule.	Facility is not an acid rain source.

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62 -213 .415 (1)	Operation Permits for Major Sources of Air Pollution: Trading of Emissions Within a Source - Emissions Caps Allowed			X	FDEP allows trading of emissions among units in a permitted source solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements.	Facility is not establishing emissions caps in this permit application, but can use this provision in a future permit application.
62 -213 .415 (2)	Operation Permits for Major Sources of Air Pollution: Trading of Emissions Within a Source			X	No permit revision shall be required provided the permitted source complies with the notice and recordkeeping provisions of this section and provided the permitted source had submitted with its last Title V permit application information listed in this rule.	Facility is not establishing emissions caps in this permit application, but can use this provision in a future permit application.
62 -213 .415 (3)	Operation Permits for Major Sources of Air Pollution: Trading of Emissions Within a Source			X	The source shall provide written notice to EPA and FDEP at least 30 days before implementation of each mode of operation, and the date upon which the change will occur.	Facility is not establishing emissions caps in this permit application, but can use this provision in a future permit application.
62 -213 .420 (1)	Operation Permits for Major Sources of Air Pollution: Permit Applications - Duty to Apply	X			For each Title V source, the owner shall submit a timely and complete permit application in compliance with the requirements of this section and 62-4.050(1), (2), and 62-210.900, FAC. Timeliness and completeness criteria are presented in this rule. For sources commencing operation after January 2, 1995 (except sources subject to the Florida Electric Power Plant Siting Act), an application must be submitted at least 90 days before the source's construction permit expires, but no later than 180 days after commencing operation. Permit applications are deemed complete within 60 days of receipt of a signed application unless FDEP notifies the applicant of incompleteness within that time. The applicant will have 90 days to submit the requested information. FDEP has 30 days to notify the applicant of an incomplete or incorrect application as a result of a comment from an affected state, EPA, a local air program , or the public.	Facility must submit a Title V permit application to FDEP within 180 days of becoming a major source of air pollution.
62 -213 .420 (2)	Operation Permits for Major Sources of Air Pollution: Permit Applications - Confidential Information		X		Whenever an applicant submits information under a claim of confidentiality, the applicant must also submit a copy of all such information and claim directly to EPA.	Facility is government-owned and operated - nonproprietary.
62 -213 .420 (3)	Operation Permits for Major Sources of Air Pollution: Permit Applications - Standard Application Form and Required Information	X			Applications shall be submitted under this chapter on forms provided by the department and adopted by reference in 62-210.900(1), FAC. The information as described in 62-210.900(1), FAC, shall be included for the Title V source and each emissions unit, and must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit. The application shall specifically include information listed in this rule.	Facility will include required information in application submittal.

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62 -213 .420 (4)	Operation Permits for Major Sources of Air Pollution: Permit Applications - Certification by Responsible Official	X			In addition to the professional engineering certification required for applications by 62-4.050(3), FAC, any application form, report, compliance statement, compliance plan, and compliance schedule submitted pursuant to this chapter shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information contained in the document are true, accurate, and complete.	Responsible official will sign the application.
62 -213 .430 (1)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - Action on Application			X	Except for those applications submitted pursuant to 62-213.420(1)(a)1., FAC, the department shall issue a draft permit or a determination that the requested permit be denied within 90 days of receipt of the latest of: the application; the last item of information requested pursuant to 62-213.420(1)(b), FAC; or, a written request to process the application without the requested information. The department shall issue a permit, permit revision, or renewal only after all of the following have been met: (a) A complete and signed application has been submitted; (b) The requirements for notice and public participation have been met; (c) The requirements for notification of any affected state and any approved local air program have been met; (d) FDEP has provided EPA with a copy of the draft permit and a statement outlining the basis for the permit conditions.	Action required by the state regulatory agency.
62 -213 .430 (2)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - Permit Denial			X	If FDEP proposes to deny a permit, FDEP must provide an explanation of the denial.	Action required by state regulatory agency.
62 -213 .430 (3)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - Permit Renewal and Expiration			X	Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in 62-210.900(1) and 62-213.420(3), FAC. Unless a source submits a timely application for permit renewal in accordance with the requirements of 62-4.090(1), FAC, the existing permit shall expire and the source's right to operate shall terminate.	Will apply when facility applies for a permit renewal.
62 -213 .430 (4)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - Permit Revision Procedures			X	Permit revisions must meet all the requirements of 62-213 including content of application, public participation, review by approved local air programs, affected states, and EPA as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to 62-213.430(1)(b), FAC. The department shall require permit revision in accordance with the provisions of 62-4.080, FAC, and 40 CFR 70.0(f), whenever any source becomes subject to any condition listed in 40 CFR 70.7(f)(1).	This facility is not currently revising an existing permit, but will meet requirements in the future if Title V application is revised.

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62 -213 .430 (5)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - EPA Recommended Actions			X	Within 90 days after receipt of notification from EPA that cause exists to modify, suspend, or revoke a permit, the department must investigate and determine whether cause exists pursuant to 40 CFR 70.0(f)(1). If cause exists, the department shall act to modify, suspend, or revoke the permit.	Action required by state regulatory agency.
62 -213 .430 (6)	Operation Permits for Major Sources of Air Pollution: Permit Issuance, Renewal, and Revision - Exemption of Emissions Units or Pollutant-Emitting Activities	X			All requests for exemption of emissions units or activities made pursuant to 62-213.420(3)(m), FAC, shall be processed in conjunction with the permit, permit renewal, or permit revision application submitted pursuant to this chapter. Exemptions shall be approved by the department consistent with the provisions of 62-4.040(1)(b), FAC. Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify for exemption from permitting pursuant to this rule. Exemption criteria are listed in this rule.	Facility will include a list of emissions units proposed as exemptable activities in the Title V air operating permit application.
62 -213 .440 (1)	Operation Permits for Major Sources of Air Pollution: Permit Content - Standard Permit Requirements	X			Each permit issued under this chapter shall incorporate all applicable requirements for the Title V source anf for each method of operation proposed by the applicant and approved by the department. Each such permit shall include all emission limitations that assure compliance with all applicable requirements, with citation to the department's rule authority for each term or condition, and identification of any difference in form from the applicable requirement upon which the term or condition is based. Emissions units or pollutant-emitting activities within a Title V source exempted pursuant to 62-213.430(6), FAC shall be identified. The permit shall include information relating to permit duration; emissions monitoring, recordkeeping, and reporting requirements; and emissions allowances.	Permit will include standard emissions limitations, allowed modes of operation, compliance requirements, statement of compliance.
62 -213 .440 (2)	Operation Permits for Major Sources of Air Pollution: Permit Content - Compliance Requirements	X			For each applicable requirement for which one or more units within a source is not in compliance at the time of application for any permit, permit renewal, or permit revision, and for which the unit has not come into compliance at the date of issuance of the draft permit, the draft permit shall contain: a provision that the source shall meet measurable and enforceable milestones on no less than a quarterly basis until compliance is achieved and demonstrated to the department, and a provision requiring the source to be in compliance by the date specified in the permit.	Facility will determine compliance with all applicable regulations and submit a plan to achieve compliance for emissions units found to be out-of compliance.

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		Yes	No			
62 -213 .440 (3)	Operation Permits for Major Sources of Air Pollution: Permit Content - Statement of Compliance	X			For each applicable requirement, the permit shall contain: a provision for assessing or monitoring compliance for each unit within the source; a provision that the source submit a statement of compliance with all terms and conditions of the permit. Such statements must be submitted at least annually and must be accompanied by a certification, in accordance with 62-213.420(4), FAC; and a requirement that the statement of compliance status include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement.	Facility will identify applicable requirements and compliance status in the application, and will include a compliance certification signed by the responsible official.
62 -213 .450 (1)-(4)	Operation Permits for Major Sources of Air Pollution: Permit Review by EPA and Affected States			X	NO ACTION REQUIRED BY THE FACILITY. FDEP shall give notice of each draft permit to any affected state and any approved local air program having ecographical jurisdiction of the source.	Action required by state regulatory agency.
62 -213 .450 (3)	Operation Permits for Major Sources of Air Pollution: Permit Review by EPA and Affected States - Department Notification of Refusal to Accept Recommendations			X	FDEP must notify EPA and any affected state of any refusal of FDEP to accept all recommendations for the draft permit that the affected state submitted during the public or affected state review period.	Action required by state regulatory agency.
62 -213 .450 (4)	Operation Permits for Major Sources of Air Pollution: Permit Review by EPA and Affected States - EPA Objection			X	FDEP shall not issue any permit, permit revision or permit renewal if EPA objects to issuance, in writing, within 45 days of receipt of the proposed permit.	Action required by federal and state regulatory agencies.
62 -213 .460	Operation Permits for Major Sources of Air Pollution: Permit Shield	X			Except as provided in this chapter, compliance with the terms and conditions of a permit issued pursuant to this chapter shall be deemed compliance with any applicable requirements in effect as of the date of the permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in this section or in any permit shall alter or affect the ability of EPA or the department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.	Facility can operate under permit application, provided application addresses all applicable requirements.
62 -213 .900	Operation Permits for Major Sources of Air Pollution: Forms and Instructions	X			The forms used by the department in the Title V source operation program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. (1) Major Air Pollution Source Annual Emissions Fee Form; (2) Perchloroethylene Dry Cleaner General Permit Notification Form.	Facility will prepare application using FDEP form 62-213.900(1).

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		Yes	No	Applies But No Action Required		
62 -214 .100	Requirements for Sources Subject to the Federal Acid Rain Program: Purpose and Scope		X		This chapter outlines the additional permitting requirements for Title V sources subject to the Federal Acid Rain Program. The rules under this chapter set forth requirements for the Acid Rain Part of an operating permit for a Title V source which is subject to the Federal Acid Rain Program. The department intends that this chapter shall implement and be consistent with the federal requirements of 40 CFR Part 72.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .300	Requirements for Sources Subject to the Federal Acid Rain Program: Applicability		X		Effective January 2, 1995, owners and operators of a Title V source that contains an Acid Rain unit shall operate the source and each Acid Rain unit in compliance with Chapter 62-213, FAC, and shall comply with the applicable requirements of this chapter. An Acid Rain Unit is defined in 62-210.100(10), FAC, as a fossil fuel fired combustion device listed as subject to any emissions reduction requirement or Acid Rain emissions limitation at 40 CFR 72.6.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .320 (1)-(2)	Requirements for Sources Subject to the Federal Acid Rain Program: Applications		X		The designated representative of any Title V source containing an Acid Rain unit shall submit to the Department a complete Acid Rain Part application no later than the applicable deadline of this section. The Acid Rain Part application shall be submitted pursuant to this chapter and 62-213, FAC. The owners and operators of such source and any Acid Rain unit at the source shall not operate the source or unit without a Title V permit which includes an Acid Rain Part, except that a source having a valid air construction or operation permit or a site certification pursuant to the Florida Electrical Power Plant Siting Act and for which the designated representative has submitted a timely and complete initial Acid Rain Part application shall be deemed in compliance with the Federal Acid Rain Program requirements provided that the designated representative submits all timely supplemental information as provided at 62-213.420, FAC, and provided the source operates in compliance with the terms and conditions of the Acid Rain Part application during the Department's processing of the application.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .330 (1)-(2)	Requirements for Sources Subject to the Federal Acid Rain Program: Acid Rain Compliance Plan and Compliance Options		X		The designated representative shall submit to the Department a complete Acid Rain compliance plan for each Acid Rain unit included in an Acid Rain Part application, including the information contained in this rule. The designated representative may include in the compliance plan options using repowering extensions of the Acid Rain source and the designated representative meet the criteria listed in this subsection, including source limitation, timing, and certification requirement.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.

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62 -214 .340 (1)-(7)	Requirements for Sources Subject to the Federal Acid Rain Program: Exemptions		X		The designated representative of an Acid Rain unit may apply to the Department for written exemption from certain requirements of the Federal Acid Rain Program in accordance with this section. Such request for written exemption shall be submitted on FDEP Form 62-210.900(1)(a)2. or 3. and shall be processed as part of an application for initial or renewal Title V source permit, or as a revision to such permit, pursuant to the procedures of this chapter and 62-213, FAC. Criteria for exemption are listed in this section.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .350 (1)-(6)	Requirements for Sources Subject to the Federal Acid Rain Program: Certification		X		The department shall accept or act on a submission made on behalf of owners and operators of an Acid Rain source and an Acid Rain unit only if the submission has been made, signed, and certified in accordance with the provisions of this section.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .360 (1)-(6)	Requirements for Sources Subject to the Federal Acid Rain Program: Department Action on Applications		X		Any application submitted pursuant to this chapter, including any proposal for any repowering extension plan, new unit exemption or retired unit exemption, is part of a Title V source permit application and shall be processed by the Department under the provisions of 62-213.420 and 62-213.430, FAC, with additional limitations as listed in this section.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .370 (1)-(7)	Requirements for Sources Subject to the Federal Acid Rain Program: Revisions and Administrative Corrections		X		Except as specifically provided in this section, all revisions of and administrative corrections to an Acid Rain Part of a final Title V source permit shall be processed in accordance with the provisions of 62-213 and 62-210, FAC, respectively.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .420 (1)-(12)	Requirements for Sources Subject to the Federal Acid Rain Program: Acid Rain Part Content		X		In addition to the requirements of 62-213, FAC, any draft, proposed, or final Acid Rain Part, shall contain the information listed in this section.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -214 .430 (1)-(4)	Requirements for Sources Subject to the Federal Acid Rain Program: Implementation and Termination of Compliance Options		X		Requirements for activation and termination of compliance options are listed in this section.	Facility does not include any Acid Rain units and is not subject to the requirements of the Federal Acid Rain Program.
62 -242 .100	Motor Vehicle Emissions: Purpose and Scope			X	The Department adopts this chapter to provide the Department of Highway Safety and Motor Vehicles with the necessary rules, standards, and criteria to administer the Florida Motor Vehicle Inspection Program. The Department has established in-use emissions standards, listed in this section, that are achievable with proper operation and maintenance of the various model year vehicles, if they have not been tampered with, and which will result in a significant reduction in ozone-causing air pollutant emissions from automobiles and light-duty trucks. This chapter is intended as an integral part of the Department's program to achieve and maintain the National Ambient Air Quality Standards for ozone, carbon monoxide, and particulate matter; and to control nuisance emissions.	This regulation applies to on-road motor vehicles operated by the facility owner.

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62 -242 .200	Motor Vehicle Emissions: Definitions			X	Definitions for this chapter are listed in this section.	
62 -242 .400 (1)-(6)	Motor Vehicle Emissions: Standards and Procedures for Inspection of Gasoline-Fueled Vehicles; Pass/Fail Criteria	X			Each inspection of a nonexempt gasoline-powered motor vehicle shall include a three-point check. Where nitrous oxide emissions is not required, the initial test shall commence with an idle sample taken before preconditioning begins. If the vehicle meets the emissions standards for HC and CO in Table 62-242.400-1, no further testing is required. Loaded mode preconditioning and subsequent idle mode testing must be performed when nitrous oxide testing is required, or when a vehicle fails the initial testing. Provisions for 2400 rpm preconditioning testing, inspection rejection, and dual-fueled vehicle testing are included in this section.	Facility is required to have nonexempt gasoline-fueled vehicles emissions tested.
62 -242 .500 (1)-(4)	Motor Vehicle Emissions: Standards and Procedures for Inspection of Diesel-Fueled Vehicles; Pass/Fail Criteria	X			Dynamometer conditions for different sized vehicles and opacity standards are listed in this section. For vehicles that must omit the loaded mode testing, standards for idle mode testing are listed. The emissions inspector may refuse to perform the opacity test required by this section for any motor vehicle if it has an obvious exhaust system leak or other condition that could affect the validity of the opacity reading.	Facility is required to have nonexempt diesel-fueled vehicles emissions tested.
62 -242 .600 (1)-(6)	Motor Vehicle Emissions: Equipment Performance Specifications			X	Each inspection shall employ advanced technology to standardize test quality, protect the consumer, and assure the inspection data security, accuracy, storage, retrieval, and forwarding. Computer operated analyzers and dynamometers are required. This section includes criteria for dynamometer specifications, demonstration of compliance with equipment performance specifications, calibration and maintenance of test equipment, and instrument audits.	Action required by the motor vehicle inspection program (MVIP) facility.
62 -242 .700 (1)-(5)	Motor Vehicle Emissions: Tampering Inspection			X	Tampering inspection requirements for various model year vehicles are listed in this section.	The MVIP consists of a tampering inspection that will be conducted on all nonexempt vehicles.
62 -242 .800 (1)-(5)	Motor Vehicle Emissions: Low Emissions Adjustment			X	A low emissions adjustment is required pursuant to the waiver provisions of Section 325.209, F.S., and Department of Highway Safety and Motor Vehicles Rule 15C-6.002, FAC. The adjustment for a gasoline-powered motor vehicle is designed to adjust and repair or replace common tune-up components of the engine in an effort to restore the vehicle to the manufacturer's specifications and minimize the amount of exhaust emissions. The low emissions adjustment for gasoline and diesel engines shall consist of performing the procedures listed in this section.	Low emissions adjustment may be required for vehicles that do not pass an initial inspection.

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62 -242 .900 (1)-(5)	Motor Vehicle Emissions: Training Criteria for Motor Vehicle Inspection Personnel			X	Criteria are included in this section for inspector certification, training curriculum, instructor qualifications, training facility requirements, and approval of training facilities and course instructions.	Action required by state agency and MVIP.
62 -243 .100	Tampering With Motor Vehicle Air Pollution Control Equipment: Purpose and Scope			X	The Department adopts this chapter to establish procedures to determine compliance with those parts of Section 316.2935, FS, which provide that no person shall operate on public roads or streets of this state any motor vehicle that has been tampered with and that no person or motor vehicle dealer shall offer or display for retail sale or lease, sell, or transfer title to a motor vehicle in Florida that has been tampered with.	Facility does not operate vehicles with emission systems that have been tampered with.
62 -243 .300 (1)-(4)	Tampering With Motor Vehicle Air Pollution Control Equipment: Exemptions	X			Exemption criteria for this chapter are listed in this section.	Facility operates vehicles that qualify for the exemption, based on vehicle weight.
62 -243 .400 (1)-(2)	Tampering With Motor Vehicle Air Pollution Control Equipment: Prohibitions	X			On and after January 1, 1990, no person shall operate on public roads or streets of this state any nonexempt motor vehicle that has been tampered with. Except as provided in 62-243.300(3), FAC, on and after July 1, 1990, no person or motor vehicle dealer shall offer or display for retail sale, sell, lease, or transfer title to a nonexempt motor vehicle in Florida that has been tampered with.	Prohibition applies to vehicles operated by the facility.
62 -243 .500 (1)-(2)	Tampering With Motor Vehicle Air Pollution Control Equipment: Certification	X			Certification statement requirements and acknowledgment of certification requirements are listed in this section.	Vehicles owned and operated by the facility must be certified at the time of sale for emissions compliance.
62 -243 .600 (1)-(7)	Tampering With Motor Vehicle Air Pollution Control Equipment: Enforcement			X	Provisions for enforcement of the rules included in this chapter are listed in this section.	Action required by local law enforcement.
62 -252	Gasoline Vapor Control:		X		Emission limiting standards and control technology requirements are established for gasoline dispensing facilities located in Broward, Dade, and Palm Beach counties or any area designated as a nonattainment area or air quality maintenance area for ozone.	Facility does not operate any gasoline storage tanks that are subject to Stage I or Stage II vapor control requirements.
62 -252 .100 (1)-(3)	Gasoline Vapor Control: Purpose and Scope		X		The department adopts this chapter to establish and administer a program to ensure the installation and proper use of gasoline vapor recovery equipment for fuel transport, transfer, and dispensing operations. The intent of this program is to reduce the release of potentially harmful hydrocarbon vapors into the atmosphere. This chapter addresses Stage I vapor control, Stage II vapor control, and gasoline tanker truck-testing. This chapter provides a gasoline vapor control program designed to significantly reduce emissions of VOCs and toxics from the transport, transfer, and dispensing of gasoline in Florida.	Facility does not operate any gasoline storage tanks that are subject to Stage I or Stage II vapor control requirements.

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62 -252 .300 (1)-(4)	Gasoline Vapor Control: Gasoline Dispensing Facilities - Stage I Vapor Recovery		X		The emission limiting standards and control technology requirements as set forth in this section apply to: all gasoline dispensing facilities with a monthly throughput of 20,000 gallons or more located in an ozone nonattainment area or air quality maintenance area; and all gasoline dispensing facilities which are subject to the Stage II vapor recovery requirements. No owner or operator of any delivery vessel or gasoline dispensing facility subject to the provisions of this section shall transfer gasoline from any such vessel into any stationary storage tank located at any gasoline dispensing facility unless the tank is equipped for submerged filling and the vapors displaced from the storage tank during filling are processed by a vapor recovery system in accordance with 62-252.300(3), FAC.	Facility does not operate any gasoline storage tanks that have a throughput of more than 20,000 gallons per month.
62 -252 .400 (1)-(6)	Gasoline Vapor Control: Gasoline Dispensing Facilities - Stage II Vapor Recovery		X		The control technology requirements as set forth in this section apply to all gasoline dispensing facilities located in Broward, Dade, and Palm Beach Counties which have dispensed 10,000 gallons of gasoline or more during any one month period during or after 1991, unless the owner of any such facility demonstrates to the Department that it is an independent small business marketer of gasoline and has dispensed less than 50,000 gallons of gasoline in every month during and after 1991.	Facility has not dispensed more than 10,000 gallons gasoline during any one month period since 1991.
62 -252 .500 (1)-(3)	Gasoline Vapor Control: Gasoline Tanker Trucks		X		All gasoline tanker trucks or trailers are subject to the prohibitions of 62-252.500(2), FAC. In addition, all gasoline tanker trucks or trailers with a delivery-vessel capacity of more than 4,500 gallons are subject to the leak testing requirements of 62-252.500(3), FAC.	Facility does not own or operate any gasoline tanker trucks.
62 -252 .900	Gasoline Vapor Control: Forms		X		Gasoline Tanker Truck Leak Test Report.	Facility does not own or operate any gasoline tanker trucks, and, therefore, is not required to submit tanker truck leak test reports to the Department.
62 -256 .100 (1)-(5)	Open Burning and Frost Protection Fires: Declaration and Intent		X		The Department finds and declares that the open burning of materials outdoors and the use of outdoor heating devices result in or contribute to air pollution. The Department finds that regulation of open buring and outdoor heating devices will reduce air pollution. It is the intent of the Department to require that open burning be conducted in a manner to reduce or eliminate the noise and air pollution caused by it; and to phase out open burning of certain materials and heating devices used for crop protection against frost, and to require that devices that emit a minimum of air pollutants be used. The	Facility does not conduct open burning.

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62 -256 .100 (1)-(5) (Continued)					department finds that certain fuels release less pollution, when burned, than others, and intends to approve fuels for frost protection that release a minimum amount of pollution in lieu of other fuels. The Department finds that there are alternative disposal methods for pesticide containers preferable to open burning and will encourage individual to use these methods.	
62 -256 .300 (1)-(9)	Open Burning and Frost Protection Fires: Prohibitions		X	X	Prohibitions are listed in this section.	Facility does not conduct open burning.
62 -256 .450 (1)-(4)	Open Burning and Frost Protection Fires: Burning for Cold and Frost Protection		X		Open burning or the use of outdoor heating devices for frost or cold protection in connection with agricultural operations is allowed, provided the fuel and the heating device used have approval from the Environmental Regulatory Commission prior to use, or have been authorized by the Secretary pursuant to 62-256.450(4), FAC. A list of fuels and heating devices approved for use, criteria for approval of new fuels and heating devices, operating conditions, and exemptions is provided in this section.	Facility does not conduct open burning for cold and frost protection.
62 -256 .500 (1)-(6)	Open Burning and Frost Protection Fires: Land Clearing		X		See regulation for rules that apply to non-rural land clearing open burning.	Facility does not conduct land clearing open burning.
62 -256 .600 (1)-(5)	Open Burning and Frost Protection Fires: Industrial, Commercial, and Research Open Burning			X	Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when it is determined by the Department to be the only method of operation and prior approval is obtained from the Department, or when an emergency exists, or in connection with municipal operations to burn hurricane, tornado, fire, or other disaster generated yard trash using an air curtain incinerator as specified in 62-256.500(2), FAC.	Facility does not conduct open burning. However, in the event of a disaster, the facility may burn yard trash as approved by FDEP.
62 -256 .700 (1)-(5)	Open Burning and Frost Protection Fires: Open Burning Allowed		X		This section includes a listing of open burning activities, and criteria by which those activities must qualify, that the Department has determined to be acceptable.	Facility does not conduct open burning.
62 -256 .800	Open Burning and Frost Protection Fires: Effective Date		X		This chapter, unless otherwise specified, shall become effective July 1, 1971.	Facility does not conduct open burning.
62 -257 .100 (1)-(4)	Asbestos Removal: Purpose		X		This chapter establishes a fee for asbestos removal projects. The purpose of the Department's asbestos removal program is to prevent the release of significant amounts of asbestos fibers to the outside air during demolition or renovation activities. Asbestos fibers in the outside air present a risk to human health. The purpose of the fee is to implement the Department's Asbestos Removal Program. This chapter requires prior notification to the Department by the owner or operator of any asbestos removal project.	Facility does not conduct asbestos removal projects.

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62 -257 .200	Asbestos Removal: Definitions		X		Definitions for this chapter are included in this section.	Facility does not conduct asbestos removal projects.
62 -257 .301 (1)-(6)	Asbestos Removal: Notification Procedure and Fee		X		The provisions of this chapter apply to each owner and operator of an asbestos removal project and to each owner and operator of the site for an asbestos removal project. It is the intent of this chapter to require only one asbestos notification fee for each asbestos removal project.	Facility does not conduct asbestos removal projects.
62 -257 .400 (1)-(4)	Asbestos Removal: Fee Schedule		X		Each asbestos removal project fee shall be calculated in accordance with the fee schedule included in this section.	Facility does not conduct asbestos removal projects.
62 -257 .900	Asbestos Removal: Form		X		Notice of Asbestos Removal Project	Facility does not conduct asbestos removal projects.
62 -281 .100	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Purpose and Scope	X			The Department adopts this chapter to establish and administer a program to ensure the installation and proper use of motor vehicle refrigerant recycling equipment and to certify establishments and persons who are trained in the use of equipment. The intent of this program is to reduce the release of chlorofluorocarbons (CFCs) to the atmosphere in Florida by preventing leakage and disposal of refrigerants from motor vehicle air conditioners (MVACs). This chapter establishes fees for issuance and biennial renewal of certificates of compliance.	Facility staff perform MVAC service and repair activities.
62 -281 .300 (1)-(2)	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Applicability	X			The following shall be affected establishments and shall comply with the requirements of this chapter: those that install or services MVAC; and those that release or may release refrigerants in the course of performing collision repair, parts changing, or salvaging/dismantling of vehicles. A mobile service unit is considered part of the affected establishment from which it operates and is not required to be certified separately.	Facility staff perform MVAC service and repair activities.
62 -281 .400 (1)	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Compliance Requirements for Affected Establishments	X			No establishment shall intentionally vent or dispose of refrigerants to the atmosphere; install, service, repair, salvage, destroy, or dismantle a MVAC without the use of approved refrigerant recycling equipment; or recharge an MVAC system with recovered refrigerant that has not been either recycled on-site or reclaimed to the ARI Standard of Purity 700-88 by a refrigerant reclamation facility.	Facility performs MVAC repairs in accordance with this chapter.
62 -281 .400 (2)	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Compliance Requirements for Affected Establishments	X			Each affected establishment shall have mechanics, trained in the proper operation and maintenance of refrigerant recycling equipment and in the proper procedures for recovering and recycling used refrigerants from MVACs, performing or supervising these services at all times, including any services provided by a mobile unit. Training must satisfy the requirements of this section.	Technicians responsible for MVAC repair and service are trained and certified.

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62 -281 .400 (3)	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Compliance Requirements for Affected Establishments	X			Each establishment subject to this rule shall keep records relating to MVAC service and to the purchase, recycling, and reclamation of MVAC refrigerants. Records must be kept for a minimum of three years from date of service, must be available for Department inspection, and must include information listed in this section.	Facility keeps records of MVAC repair and service, and refrigerant purchase, recycling, and reclamation.
62 -281 .500 (1)-(5)	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Establishment Certification	X			Each affected establishment shall obtain a certificate of compliance. Affected establishments are required to submit initial notification of compliance to the Department on FDEP form 62-281.900(1). Affected establishments must renew its certificate of compliance using this form, along with the fee, and submit prior to expiration of the certificate. The fee is $75 and must be submitted biennially. The department issues certificates for a period of 2 years upon receipt of a complete application. The certificates are not transferable, and the owner or operator must notify the Department within 30 days of change of address or ownership.	Facility is certified by the Department to perform MVAC refrigerant recovery and recycling.
62 -281 .900	Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling: Forms	X			(1) Initial Notification of Compliance; (2) Renewal/Update Notification of Compliance	Facility will submit Renewal/Update Notification of Compliance along with fee to Department every 2 years.
62 -296 .100	Stationary Sources - Emissions Standards: Purpose and Scope	X			The Department adopts this chapter to establish emission limiting standards and compliance requirements for stationary sources of air pollution. This chapter includes emission limitations for specific categories of facilities and emissions units, and it establishes reasonably achievable control technology (RACT) requirements. Where work practice standards, including requirements for specific types of pollution control equipment, are provided for in this chapter, such standards shall be of the same force and effected as emissions limiting standards. The emission limiting and work prozctice standards of 62-296.320, FAC, and 62-296.401 through 62-296.417, FAC, are applicable statewide. Standards for any new facility or emission unit shall be the federal standards of performance for new stationary sources (NSPS), unless a different and more stringent standard is established in 62-296.401 through 62-296.417, FAC. In addition, RACT requirements are established for specific areas of the state in 62-296.500, 62-296.600, and 62-296-700, FAC.	Facility is required to comply with various facility-wide and source-specific emission standards.
62 -296 .320 (1)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: VOC and Solvent Handling	X			It is prohibited to store, pump, handle, process, load, unload, or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by FDEP.	Facility is required to use control measures when handling solvents used to clean metal parts.

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62 -296 .320 (2)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: Objectionable Odor Prohibited	X			It is prohibited to permit the discharge of air pollutants which cause or contribute to an objectionable odor.	Applies to entire facility.
62 -296 .320 (3)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: Industrial, Commercial, and Municipal Open Burning Prohibited			X	Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when it is the only feasible method of operation and is authorized by the Department; an emergency exists; or a county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire, or other disaster and the incinerator would be operated in accordance with 62-210.300(3), FAC.	Facility does not conduct open burning. However, in the event of a disaster, the facility may burn yard trash as approved b the FDEP.
62 -296 .320 (4)(a)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: Particulate Emission Limiting Standards, Process Weight Table		X		The following emission limiting standards shall apply to sources of particulate matter not subject to a particulate emission limit or opacity limit set forth otherwise: the total quantities shown in Table 62-296.320-1. Interpolation of the data in the Table by the following formulas: E=3.59 P0.62 for P<30 tons/hr, E=17.31 P0.16 for P>30 tons/hr, where E=emission in lb/hr and P=process weight rate in tons/hr. The emission limitations shall apply to any source which processes raw materials to produce a finished product through a chemical or physical change except sources which: Burn fuel to produce heat or power by indirect heating where the products of combustion do not come in contact with the process materials; Burn refuse; Salvage materials by burning.	Facility does not operate any processes that generate particulate matter.
62 -296 .320 (4)(b)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: General Visible Emissions Standard	X			For any air pollutant discharged from new, or existing sources, whose density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart, the opacity must be less than 20%. FDEP may establish a higher visible emissions standard if it finds: The emissions unit was in compliance with the applicable particulate emission standard while a compliance test was being conducted but failed to comply with the general visible emissions standard during the test; The emissions unit and associated air pollutant control equipment were operated and maintained in a manner to minimize the opacity emissions during the compliance test; The emissions unit and associated air pollution control equipment were incapable of being adjusted or operated in such a manner to meet the opacity standard.	Applies to the entire facility.

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62 -296 .320 (4)(c)	Stationary Sources - Emissions Standards: General Pollutant Emission Limiting Standards: Unconfined Emissions of PM	X			Reasonable precautions must be taken to prevent the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling. Permit conditions shall specify the reasonable measures to control these emissions. Reasonable precautions include: Paving and maintenance of roads, parking areas, and yards; Application of water or chemicals to control emissions; Application of dust suppresants to unpaved roads, yards, and open piles; Removal of particulate matter from roads and other paved areas to prevent reentrainment, and from buildings or wwork areas to prevent PM from becoming airborne; Landscaping or planting of vegetation; Use of hoods, fans, and filters; Confining abrasive blasting where possible; and Enclosure or covering of conveyor systems.	Applies to the entire facility. Facility employs dust suppression methods to control fugitive dust from the landfill.
62 -296 .401 (1)-(5)	Stationary Sources - Emissions Standards: Incinerators		X		See rule for applicability and emission limiting standards.	This facility does not operate an incinerator.
62 -296 .416	Stationary Sources - Emissions Standards: Waste-to-Energy Facilities		X			This facility is not a waste-to-energy facility.
62 -296 .500	Stationary Sources - Emissions Standards: Reasonably Available Control Technology (RACT) - Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) Emitting Facilities		X		Emission limiting standards and other requirements of 62-296.501 through 62-296.516, FAC, shall apply to existing VOC-emitting facilities in all designated ozone nonattainment and air quality maintenance areas. In addition, the emission limiting standards of these rules shall apply to new and modified VOC-emitting facilities which have been or would be subject to review pursuant to 62-212.400 (PSD) or 62-212.500, FAC (NSR). In addition to the applicable requirements of this rule, the specific emission limiting standards and other requirements of 62-296.570, FAC, shall apply in Broward, Dade, and Palm Beach counties to major VOC-emitting facilities not regulated in whole under 62-296.501 through 62-296.516, FAC, and major NOx-emitting facilities, except those new and modified major VOC- and NOx-emitting facilities which have been or would be subject to review pursuant to 40 CFR 52.21 (PSD) or Florida 17-2.17 (repealed), 17-2.500 (transferred), 17-2.510 (transferred), 62-212.400, or 62-212.500, FAC.	Facility is not located in an ozone nonattainment or air quality maintenance area, and facility is not in Broward, Dade, or Palm Beach County.
62 -296 .511	Stationary Sources - Emissions Standards: Solvent Metal Cleaning	X				Facility operates cold cleaner type units for parts degreasing.

Exhibit E-2
State Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -296 .513	Stationary Sources - Emissions Standards: Surface Coating of Miscellaneous Metal Parts and Products		X			This facility does not perform surface coating operations.
62 -296 .516	Stationary Sources - Emissions Standards: Petroleum Liquid Storage Tanks with External Floating Roofs		X			This facility does not have petroleum liquid storage tanks with external floating roofs.
62 -296 .570	Stationary Sources - Emissions Standards: Reasonably Available Control Technology (RACT) - Requirements for Major VOC - and NOx-Emitting Facilities		X		The requirements of this rule shall apply to those major VOC- and NOx-emitting facilities specified in 62-296.500(1)(b), FAC; specifically, to the VOC emission units with such facilities which are not regulated for VOC under 62-296.501 through 62-296.516, FAC, and those VOC and NOx emission units which have not been exempted pursuant to 62-296.500(1)(b), FAC, or by a specific provision of 62-296.500 through 62-296.516, FAC. The requirements of this rule shall not apply to emissions units that are exempt from the air permitting requirements of the Department pursuant to 62-210.300, FAC.	The facility is not located in an ozone nonattainment or air quality maintenance area, and the facility is not in Broward, Dade, or Palm Beach County.
62 -296 .700	Stationary Sources - Emissions Standards: Reasonably Available Control Technology (RACT) Particulate Matter		X			The facility is not located in a PM air quality maintenance area (AQMA).
62 -296 .703	Stationary Sources - Emissions Standards: Carbonaceous Fuel Burners		X			The facility does not operate any sources that burn carbonaceous fuels and is not located in a particulate matter AQMA
62-296.711	Stationary Sources - Emissions Standards: Materials Handling, Sizing, Screening, Crushing and Grinding Operations		X			The facility has materials handling and screening operations, but is not located in a particulate matter AQMA.
62 -296 .712	Stationary Sources - Emissions Standards: Miscellaneous Manufacturing Process Operations		X		The emissions limitations and other requirements of this section shall apply to miscellaneous manufacturing process operations for which a specific RACT emission limitation has not been established in 62-296.401 through 62-296.415, FAC, or 62-296.701 through 62-296.711, FAC, including but not limited to such operations as heat treating furnaces, waste heat evaporators, corebaking ovens, mixing kettles, blast furnaces, pudding furnaces, dryers, stills, roasters, and all other methods or forms of manufacturing or processing which emits particulate matter.	The facility does not manufacture anything and is not located in a particulate matter AQMA.

Exhibit E-2
State Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -297 .100	Stationary Sources - Emissions Monitoring: Purpose and Scope		X		The Department adopts this chapter to establish test procedures that shall be used to determine the compliance of air pollutant emissions units with emission limiting standards specified in or established pursuant to any of the stationary source rules of the Department.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (1)-(9)	Stationary Sources - Emissions Monitoring: General Test Requirements:		X		For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct; and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emissions rate was measured. The three test runs shall be completed within one consecutive five day period. The emission rate shall be based on an arithmetic average.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (4)	Stationary Sources - Emissions Monitoring: General Test Requirements; Applicable Test Procedures.		X		For the FDEP and EPA test methods, the regulation established required sampling times, minimum sample volumes, required flow rate ranges, calibration of sampling equipment, and allowed modifications to EPA Method 5.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (5)(a)	Stationary Sources - Emissions Monitoring: General Test Requirements; Responsibility to Maintain Process Monitoring Equipment to Determine Process Variables		X		If compliance tests are required, the operator shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the source with applicable emission limiting standards.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (5)(b)	Stationary Sources - Emissions Monitoring: General Test Requirements; Requirement to Calibrate Process Monitoring Equipment to Determine Process Variables		X		Equipment and/or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (6)	Stationary Sources - Emissions Monitoring: General Test Requirements; Stack Sampling Facilities Provided by the Owner of an Air Pollution Point Source		X		Minimum requirements for stack sampling facilities that are necessary to sample point sources are specified. Sampling facilities including sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)1.	Stationary Sources - Emissions Monitoring: General Test Requirements; Compliance Test Required Prior to Issuance of Operating Permit		X		The owner or operator of a new or modified source that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standards prior to obtaining an operating permit for such source.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.

Exhibit E-2
State Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -297 .310 (7)(a)2.	Stationary Sources - Emissions Monitoring: General Test Requirements; Excess Emission Limitations for PM, Annual Testing		X		For excess emission limitations for particulate matter, a compliance test shall be conducted annually while the source is operating under soot blowing conditions except for a fossil fuel steam generator, which does not burn liquid and/or solid fuel for more than 400 hours other than during startup.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)3.	Stationary Sources - Emissions Monitoring: General Test Requirements; Compliance Testing Required Prior to Operating Permit Renewal		X		The owner or operator of a source that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)4.	Stationary Sources - Emissions Monitoring: General Test Requirements; Annual Formal Compliance Tests Required		X		During each federal fiscal year, for each emissions unit, the owner or operator shall have a formal compliance test conducted for: visible emissions, each NESHAPS pollutant, and each of the following if there is an applicable standard and if the unit emits or has the potential to emit: 5 tpy of lead, 30 tpy of acrylonitrile, or 100 tpy of any other regulated air pollutant.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)5.	Stationary Sources - Emissions Monitoring: General Test Requirements; PM Compliance Test Exemption for Combustion Sources		X		An annual compliance test for particulate matter emissions shall not be required for any fuel burning source that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)7.	Stationary Sources - Emissions Monitoring: General Test Requirements; Quarterly Compliance Testing		X		For soures electing to conduct particulate emission compliance testing quarterly, a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(a)9.	Stationary Sources - Emissions Monitoring: General Test Requirements; FDEP Notification		X		FDEP must be notified at least 15 days prior to the date on which each formal compliance test is to begin.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .310 (7)(b)	Stationary Sources - Emissions Monitoring: General Test Requirements; FDEP Right to Require Compliance Testing			X	When FDEP, after investigation, has good reason to believe that any applicable emission standard is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests.	Action required by regulatory agency.
62 -297 .310 (7)(c)	Stationary Sources - Emissions Monitoring: General Test Requirements; Proposal of Alternate Compliance Verification Procedures			X	If the owner or operator of a source that is subject to a compliance test requirement demonstrates that the compliance of the source with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate sources equipped with a baghouse, or specifying a fuel analysis for sulfur dioxide emissions, FDEP may waive the compliance test requirements for such sources and order that the alternate means of determining compliance be used.	Action on facility request.

Exhibit E-2
State Regulatory Applicability Review - Facility
Orange County Solid Waste Management Facility
Orange County Utilities Division

Regulation	Description	Applicable			Description of Applicability	Explanation
		Yes	No	Applies But No Action Required		
62 -297 .310 (8)(c)	Stationary Sources - Emissions Monitoring: General Test Requirements; Test Reports - Information Required		X		The test report shall provide sufficient detail on the source tested and the test procedures used to allow FDEP to determine if the test was properly conducted and the test results properly computed. Information identified under this rule must specifically be included.	There are no sources at the facility subject to emissions limiting standards under 62-296, FAC, that require monitoring.
62 -297 .401	Stationary Sources - Emissions Monitoring: Compliance Test Methods - EPA Methods Adopted by Reference			X	EPA Test Methods are adopted by reference.	Facility will use FDEP-accepted methods for source testing, if testing is necessary.
62 -297 .440	Stationary Sources - Emissions Monitoring: Supplementary Test Procedures:			X	Various test procedures (ASTM, EPA reports, ACGIH, API, TAPPI, SUDIC) are adopted by reference.	Facility can use test methods included in this section.
62 -297 .450	Stationary Sources - Emissions Monitoring: EPA VOC Capture Efficiency Test Procedures			X	EPA VOC Capture Efficiency Test Procedures are adopted by reference.	Capture efficiency of covered cold cleaner units is 100%, in accordance with 62-297.450(1)(a), FAC.
62 -297 .520	Stationary Sources - Emissions Monitoring: EPA Performance Specifications		X		EPA performance specifications 1 through 7 are adopted by reference.	Facility not required to install or operate CEMs on any emissions units.
62 -297 .620	Stationary Sources - Emissions Monitoring: Exceptions and Approval of Alternate Procedures and Requirements			X	The owner or operator of any source may request in writing a determination that any requirement relating to source emissions test procedures, methodology, equipment, or test facilities shall not apply to such source, and shall request approval of alternate procedures or requirements.	Although applicable, this facility is not currently requesting an exception to procedures and requirements.

EXHIBIT F

EMISSION UNIT REGULATIONS (RESPONSE TO III.B)
FEDERAL & STATE APPLICABLE REQUIREMENTS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Exhibit F

For the Orange County Solid Waste Management Facility, the emissions unit is considered to be the entire facility. Refer to Exhibit E for the list of applicable regulations that apply to the emission unit.

TM

Mulligan, Tom

From: Kozlov, Leonard
Sent: Thursday, November 18, 2004 10:04 AM
To: 'rbeladi@wcg1.com'
Cc: Garfein, Vivian; Mulligan, Tom; 'Dan.Morrical@ocfl.net'; Zahm, Alan
Subject: RE: Orange County Landfill Expansion & Title V permit modification

Ron,
I just received a response to the portable flare inquiry from the EPA in Atlanta. Yes, you can install the portable flare for up to five years which is when the waste in the cell would require gas collection. There is no reporting or modification of the permit until then.
Len

-----Original Message-----
From: Ron Beladi [mailto:rbeladi@neel-schaffer.com]
Sent: Wednesday, October 27, 2004 9:49 AM
To: Kozlov, Leonard
Cc: James W Flynt Jr.; Jim Becker; Bo Bruner; Lalonde, Stephanie; Bradner, James; Dan R. Morrical
Subject: Orange County Landfill Expansion & Title V permit modification

Len;

Once again thank you for taking the time to meet with us. As was suggested by the Department during the meeting, we have reduced the issues into specific written questions in order to receive written answers from you. We are submitting the questions in the attached letter. The hard copy of the attached letter will be mailed to your office by regular mail. Please contact me if any questions.

Regards

Ron S. Beladi, P.E.
Vice-President
Director of Solid Waste Services
WCG|Neel-Schaffer, Inc.
2600 Lake Lucien Drive
Maitland, Florida 32751
Phone: (407) 647-6623
Fax: (407) 539-0575
rbeladi@neel-schaffer.com

Jones, Dina S.

From: Jones, Dina S.
Sent: Thursday, October 07, 2004 8:52 AM
To: 'jim.becker@ocfl.net'
Cc: Mulligan, Tom
Subject: BMP Plan

Importance: High

Mr. Becker I apologize for the delay, but I was given the wrong email address for you.

-----Original Message-----
From: Jones, Dina S.
Sent: Wednesday, October 06, 2004 4:10 PM
To: 'james.becker@ocfl.net'
Subject: BMP Plan
Importance: High

October 6, 2004

James W. Becker, Manager
Orange County Utilities
Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Orange County - AP
Solid Waste Management Facility
Landfill Gas Collection and Control System Operation
Best Management Practices (BMP) Plan

Dear Mr. Becker:

Attached is an Adobe Acrobat version of a document from the Central District of the Florida Department of Environmental Protection. A free viewer is available at http://www.adobe.com/. This e-mail is an alternative a hard copy being sent by mail. If you would still like to receive a hard copy or had trouble receiving the attachments, please reply to this e-mail or call (407) 893-3334. **Please acknowledge receipt of this e-mail.**

Attachment (1)

OC LF OCD-04-098
BMP.pdf

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.
jim.becker@ocfl.net

---

was delivered to the following recipient(s):
Becker, Jim on Thu, 7 Oct 2004 08:51:57 -0400

Tracking:	**Recipient**	**Delivery**	**Read**
	'jim.becker@ocfl.net'		

Recipient	Delivery	Read
Mulligan, Tom	Delivered: 10/7/2004 8:52 AM	
Jones, Dina S.	Delivered: 10/7/2004 8:52 AM	Read: 10/7/2004 9:11 AM

Jones, Dina S.

From: Jones, Dina S.
Sent: Wednesday, October 06, 2004 4:10 PM
To: 'james.becker@ocfl.net'
Subject: BMP Plan

Importance: High

October 6, 2004

James W. Becker, Manager
Orange County Utilities
Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Orange County - AP
Solid Waste Management Facility
Landfill Gas Collection and Control System Operation
Best Management Practices (BMP) Plan

Dear Mr. Becker:

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Attachment (1)

OC LF OCD-04-098
BMP.pdf

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.
james.becker@ocfl.net

Tracking:	**Recipient**	**Delivery**
	'james.becker@ocfl.net'	
	Mulligan, Tom	Delivered: 10/6/2004 4:10 PM
	Jones, Dina S.	Delivered: 10/6/2004 4:10 PM

Department of
Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Colleen Castille
Secretary

E CORRESPONDENCE
james.becker@ocfl.net

OCD-AP-04-098

James W. Becker, Manager
Orange County Utilities – Solid Waste Division.
5901 Young Pine Road
Orlando, Florida 32829

SUBJECT: Orange County - AV
Solid Waste Management Facility
Landfill Gas Collection and Control System Operation Best Management Practices (BMP) Plan

Dear Mr. Becker:

The purpose of this letter is to provide comments on the Landfill Gas Collection System Operation Best Management Practices (BMP) Plan submitted to the Department on September 27, 2004. The comments are as follows:

Section 2 – WELLHEAD GAS PRESSURE MONITORING

- Item 3 should be changed from "the gas system must be expanded within 120 days" to "the gas collection system must be expanded within 120 days of the initial measurement of positive pressure" as per 60.755 (a)(3) of 40 CFR Part 60 Subpart WWW.

Section 2.3 – POTENTIAL REMEDIAL ACTIONS TO RESTORE VACUUM

- In regard to turning off the individual well, the Department would first like to apologize for our late response to your February 12, 2004 proposed addendum to the Gas Collection and Control System Design Plan. As per 60.753(b) of 40 CFR Part 60 Subpart WWW, the gas collection system must be operated such that there is a negative pressure at each wellhead. Although 0.0 inches w.c. is not a positive pressure, it is also not a negative pressure. The Department has no specific authority to allow such a deviation from the requirements of Subpart WWW. This request must be made directly to USEPA. The February 12, 2004 addendum to the GCCS plan cannot be approved by the Department in it's current form.

Section 2.4 – EXCEPTIONS FOR REMEDIATING PRESSURE EXCEEDENCES

- Since the second and third exemption criteria under 60.753(b) of 40 CFR Part 60 Subpart WWW are not relevant to this BMP, the second and third bullet points and the paragraph concerning their relevance should be removed from this BMP.

Section 2.5 – SUSPECTED LANDFILL FIRE CONDITIONS

- In the first sentence, "the LFG technician shall take steps to mitigate the fire and notify the County immediately" should be changed to "the LFG technician shall take steps to mitigate the fire and notify the County and the FDEP immediately" as per Chapter 62-4.130 (Plant Operation – Problems), Florida Administrative Code.

- In the fourth sentence, "the County shall notify the FDEP of the situation within one week of the initial readings..." should be changed to "the County shall notify the FDEP immediately" as per Chapter 62-4.130 (Plant Operation – Problems), Florida Administrative Code.

Section 3 – WELLHEAD OXYGEN CONCENTRATION MONITORING

- Item 3 should be changed from "or within an alternate time frame that must be approved by the U.S. EPA Administrator" to "or within an alternate time frame that must have been approved in advance by the U.S. EPA Administrator".

Section 3.1 – BMP FOR OXYGEN MONITORING AT WELLHEADS

- Regarding the third bullet point; the Department does not have the authority to permit any deviations from negative pressures in each wellhead except under the exemptions provided in 60.753(b) of 40 CFR Part 60 Subpart WWW. The February 12, 2004 addendum to the GCCS plan cannot be approved by the Department in it's current form.

Section 4.1 – ALTERNATIVE OPERATING TEMPERATURE AT SELECT WELLS

- Regarding the March 19, 2003 request to permit higher operating temperature in wells EW-2R, EW-10R, EW-30R, EW-34R, EW-35R, EW-36R, EW-37R, EW-44R, EW-48R, EW-49R, EW-51R, EW-52R, and EW-54R; 60.753(c) of 40 CFR Part 60 Subpart WWW allows for the establishment of higher operating temperatures if data is provided that indicates it will not cause fires or kill the methane-producing bacteria. The Department has determined that sufficient data has been provided to support the higher operating temperatures of the indicated wells. The Department approves operation of the indicated wells at a higher temperature.

Section 4.3 – SUBSURFACE LANDFILL FIRE RESPONSE

- In the third sentence, "the technician shall immediately notify the County of the situation" should be changed to "the technician shall immediately notify the County and the FDEP of the situation" as per Chapter 62-4.130 (Plant Operation – Problems), Florida Administrative Code.

Section 5.3.1 – EARTHEN CAP COVER EPAIR

- The timeframe included in 60.755(c) of 40 CFR Part 60 Subpart WWW should be included in this section.

Section 7.1 – WELLHEAD EXCEEDENCES

- The last sentence "the County shall notify FDEP and the U.S. Environmental Protection Agency (U.S. EPA) as soon as possible to receive approval of the proposed alternative" should be changed to "the County must notify FDEP and the U.S. Environmental Protection Agency (U.S. EPA) as soon as possible to receive approval of the proposed alternative, but must secure a response prior to the required deadline".

The BMP must be modified as described in this letter and resubmitted prior to Department approval. If you have any questions or comments, please contact Tom Mulligan at 407-893-3991.

Sincerely yours,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Date 10-6-04

LTK/tm
TOM

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road ▪ Orlando, Florida 32829
407-836-6600 ▪ Fax 407-836-6629

TM
7-22-04

July 14, 2004
File No. 09199036.16

RECEIVED
JUL 16 2004
Central Dist. - DEP

Mr. Thomas Mulligan
Florida Department of Environmental Protection
3319 Maguire Boulevard , Suite 232
Orlando, Florida 32803-3767

Subject: Notice of Startup, Shutdown, or Malfunction Event
Class III and Pre-1985 Landfill Gas Collection and Control System
Orange County Solid Waste Management Facility, Orange County, Florida
Permit No. 0950113-002-AV

Dear Mr. Mulligan:

This letter is to inform you of a recent malfunction of the landfill gas collection and control system (GCCS) for the Class III and Pre-1985 landfills at the Orange County Solid Waste Management Facility. As you know, the landfill is subject to both the New Source Performance Standards (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Under NESHAP, Orange County is required to have a Startup, Shutdown, and Malfunction (SSM) Plan for the GCCSs operated on site. As part of the SSM Plan, and as required by the NESHAP, if actions taken during a SSM event are not consistent with the SSM Plan, the County is required to notify the Florida Department of Environmental Protection (FDEP) in writing within 7 days of commencing such actions.

On July 6, 2004, at approximately 6:00 p.m., a power outage resulted in the shutdown of the GCCS, when two fuses were blown on the power pole servicing the blower/flare station. No other facilities on site were affected. As you know, per the NSPS (40 CFR 60.757(f)(4)), the GCCS cannot be offline for more than five days. Because the fuses on the power pole were not repaired and the system not restarted until 2:00 p.m. on July 12, 2004, the GCCS was offline for more than the allowable five days. Therefore, the County considers this to be a deviation from the SSM Plan.

The County has taken immediate steps to ensure that this situation does not occur again in the future. The County is investigating why the autodialer did not properly notify site personnel of the downtime, and is preparing to install a battery back-up to ensure that the autodialer remains functional in case of future outages. Modifications to the warning lights may also be implemented. Site personnel will be trained to make more thorough, routine checks of the system to confirm proper operation daily.

The County will also update the current SSM Plan, which is dated January 16, 2004, to address this situation in case of a future similar malfunction due to power failure. The revised SSM Plan will be submitted to FDEP with the next semi-annual SSM/NSPS report.

Please find the attached copies of the malfunction report form and SSM departure report form.

Please call Dan Morrical, P.E., at (407) 836-6654 if you have any questions or need additional information.

Sincerely,

James W. Becker
Manager

c: Dan Morrical, P.E., Chief Engineer, Orange County Solid Waste Division
David Penoyer, P.E., SCS Engineers
Mike Rogers, P.G., Environmental Specialist, Orange County Solid Waste Division

Startup/Shutdown/Malfunction Report Form

Section 1 - All Events

List effected piece(s) of equipment: Power Outage, OUC

Type of Event	Military Time Date/Time Start	Military Time Date/Time End	Duration (hours)	Event Code (see back of form)	SOP* Followed? Yes	SOP* Followed? No**
☐ Startup						
☐ Shutdown						
☒ Malfunction	7/6/04 9:00PM	7/13/04 2:00PM	161	16	Complete Section 2 Below	

Date Form Filled Out: 7/13/04 Signature:

* Standard Operating Procedure (SOP) for Flare Startups (Manual & Automatic) and Shutdowns are provided in SSM Plan
If SOP in SSM Plan was not followed, **notify site engineer immediately.

Section 2 - Malfunction Events Only

Step	Corrective Action Procedures for All Malfunctions	Procedure completed	Procedure Not Applicable
		P Check one of the following for each step:	
1.	Determine if landfill gas is being released to the air (can you smell landfill gas, or measure/detect gas flow?).	☒	
2.	If landfill gas is being released to the air, notify personnel on "Contact List".	☐	☒
3.	Determine if the malfunction is causing an unsafe operating condition (air entering landfill or piping, smoking, vibration, or other problem), which may harm people, the environment or the landfill gas control equipment.	☒	
4.	If unsafe operating condition exists, or landfill gas is being released to the air, stop (if possible) landfill gas flow.	☐	☒
5.	If Control device or other system component is shutdown due to Step 4, follow Shutdown SOP and Complete Section 1 - "Shutdown".	☐	☒
6.	Determine if other personnel/resource (qualified technician, electrician, consultant or other) are needed for malfunction diagnosis.	☒	
7.	If additional personnel needed, notify qualified personnel: a. Record contact name, date and time: OUC, 7/13/04 b. Contact site representative with information recorded in #7.a.	☒	☐
8.	Start malfunction diagnosis.	☒	
9.	Determine if other resources are needed to fix the malfunction (qualified technician, electrician, contractor, on-site resources, manufacturer's representative, or other).	☒	
10.	If additional resources needed, contact qualified resource: a. Record contact name, date and time: b. Contact site representative with information recorded in #10.a.	☐	☒
11.	Fix the malfunction.	☒	
12.	Once the malfunction is fixed, re-start the system per SOP if it had been shut down, and record start-up times and dates on this form.	☒	☐
13.	Record date that malfunction occurred, date that malfunction was repaired, and total time that system was out of service in boxes in Section 1 of this form.	☒	
14.	Sign this form, copy it, and place it in the Start-up, Shutdown, Malfunction file.	☒	
15.	If the procedures listed above were not followed, contact the site engineer immediately.	☐	☒

SSM PLAN DEPARTURE REPORT FORM
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

1. Type of Event: ☐ Startup ☐ Shutdown ☒ Malfunction

2. Date: 7/6/04 – 7/13/04 Time: 9:00PM / 2:00PM Duration: 161 hours

3. Provide detailed explanation of the circumstances of the startup, shutdown, or malfunction:*

Power outage was caused by blown fuses in Orlando Utilities Commission transformer in electrical line that provided power to the flare.

4. Provide description of corrective actions taken:*

Standard Operating Procedure for malfunction event was followed.

5. Describe the reasons the SSM Plan was not followed:*

Malfunction repair exceeded five days.

6. Describe any proposed revisions to the SSM Plan:*

The County will update the current SSM Plan to address the situation in case of future similar malfunction due to power failure. A battery back-up to ensure that the auto dialer remains functional in case of future outages will be installed.

7. Name (print): Adam Baughman

8. Title Staff Professional

*Use additional sheets if necessary.

Note: If the event documented in this form was a malfunction and if the SSM plan needs to be revised to address the particular type of malfunction that occurred, the revision of the SSM plan must be made within 45 days of the event.

Orange Co. 45

Tom TM Carolinas File

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FEB 09 2005

4APT-ATMB

L. T. Kozlov, P.E.
Program Administrator
Air Resources Management
Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RECEIVED
FEB 16 2005
Central Dist. - DEP

Dear Mr. Kozlov:

The purpose of this letter is to provide you with a written determination regarding proposed changes to the standard operating procedures for landfill gas extraction wells at the Orange County Solid Waste Management Facility. This landfill is subject to 40 CFR Part 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), and in a request sent to the U.S. Environmental Protection Agency (EPA) Region 4 and to your agency, Orange County proposed changes in standard operating procedures for certain wells in the landfill's active gas collection system. These changes involve an alternative to decommissioning wells where low landfill gas generation rates make it difficult to simultaneously operate wellheads at negative pressure and maintain compliance with oxygen concentration limits. Based upon our review, the changes proposed by Orange County are acceptable. Details regarding the County's proposal and the basis for our conclusions are provided in the remainder of this letter.

Operating requirements for gas collection and control systems (GCCS) are promulgated at 40 CFR §60.753(b), (c), and (d). Under these provisions, wellheads must be operated under negative pressure, the temperature of interior wellheads must be less than 55 °C, gas quality limits for interior wells (either less than 20 percent nitrogen or less than five percent oxygen) must be met, and the methane concentration at the surface of the landfill must be less than 500 parts per million (ppm). Under provisions in 40 CFR §60.755, monitoring to verify compliance with the wellhead pressure, temperature, and gas quality limits must be conducted on a monthly basis. Monitoring to verify compliance with the 500 ppm surface methane concentration limit must be conducted on a quarterly basis.

Orange County's request for approval of changes to its standard operating procedures involves wells where gas flow rates are so low that applying even minimal vacuum results in air infiltration that causes exceedances of the applicable oxygen concentration limit. Shutting such wells down will prevent the air filtration that leads to the oxygen exceedances, but shutting a well down is likely to cause positive pressure in the wellhead as landfill gas builds up. Therefore, simultaneously complying with both

the negative pressure and oxygen concentration limits in 40 CFR §60.753 can be difficult for wells where gas flow rates have declined over time.

Under provisions in 40 CFR §60.753(b)(3), wells that experience positive pressure after being shutdown to accommodate declining landfill gas flow rates can be decommissioned if permission is granted by the Administrator. As an alternative to decommissioning wells under the provisions, Orange County has proposed to make the following changes to its standard operating procedure for wells where persistent oxygen exceedances are not the result of operations and/or maintenance issues:

1. Wells where oxygen concentrations do not decline to acceptable levels after more than one hour of reduced vacuum will be shut off until the gas quality recovers.

2. The monthly monitoring required by 40 CFR §60.755 will be conducted for wells that have been shutdown, but positive pressure or elevated oxygen concentrations will not be considered exceedances of the operating limits in 40 CFR §60.753.

3. If monthly monitoring indicates that pressure has built up in the well and the oxygen concentration still exceeds five percent, the well will be opened to relieve the pressure and will be shutdown until it is monitored the following month.

4. If the monthly monitoring indicates that gas quality has improved (i.e., the oxygen concentration has dropped below five percent), the well will be brought back on line until the gas quality declines again.

5. The quarterly methane surface concentration monitoring required under 40 CFR §60.755 will be conducted for wells that have been shutdown. Standard remediation steps, including evaluating the need to return wells to full-time service, will be followed if exceedances of the 500 ppm methane surface concentration limit are detected.

According to Mr. Daniel Morical of Orange County Utilities, the operating procedure changes outlined above would apply to approximately four or five of the 130 wells at its landfill at any one time. Mr. Morical also indicated that there is a high probability of gas quality improving to the point it would be necessary to restart wells that had been shutdown. Based upon our review, the proposed changes to Orange County's standard operating procedures are acceptable because shutting down nonproductive wells, instead of decommissioning them, has the potential to lower overall nonmethane organic compound (NMOC) emissions at the landfill. This potential increase in NMOC control system efficiency stems from the ability to quickly resume gas collection if there are improvements in the gas quality or increases in the gas production rate in an area of the landfill where wells have become nonproductive. If wells in a nonproductive area are decommissioned, instead of merely being shutdown, NMOC

emissions would not be controlled between the time an exceedance is identified and a new well is installed. One condition for approval of the proposed changes in standard operating procedures at the Orange County Solid Waste Management Facility is that facility diagrams must be updated to indicate which wells have been shutdown because landfill gas production rates are too low to permit continuous extraction.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides and Toxics
Management Division

cc: Daniel Morical
Orange County Utilities – Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Orange County Solid Waste Department
109 East Church Street
Orlando, Florida 32801-7000

Attention: Michael L. Chandler, Director

Orange County - AP
Permit No.: 0950113-001-AV
Orange County Solid Waste Management Facility
Change of Conditions

Dear Mr. Chandler:

We are in receipt of a request for a change of the permit conditions. The conditions are changed as follows:

Responsible Official

From: Michael L. Chandler, Manager

To: James Becker, Manager

Title V Permit, Section II. Facility-Wide Conditions - Page 2 of 4 – Condition No. 1

Delete: The permittee shall submit all applications, tests, reports, notifications, or other submittals required by this permit to the Orange County Environmental Protection Department.

All other conditions remain the same.

This letter must be attached to your permit and becomes a part of that permit.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Date: 2-15-00

LTK/wje

cc: Dan Morrical, P.E., Chief Engineer – Orange County Solid Waste Division
James Becker, Manager – Orange County Solid Waste Division
Scott Sheplak, DARM, BAR, Title V Section
Mr. Gregg Worley, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
Mr. Joel Huey, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

Certified Mail
P 183 850 977

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. Michael L. Chandler, Manager
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

FINAL Permit No.: 0950113-001-AV
Orange County Public Utilities

Enclosed is FINAL Permit Number 0950113-001-AV for the operation of the Orlando Facility located at 12100 Young Pine Road, Orlando, Orange County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

LTK/aze

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) and all copies were sent by certified mail before the close of business on 4-15-98 to the person(s) listed:

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF FINAL PERMIT (including the FINAL permit) were sent by U.S. mail on the same date to the person(s) listed:

Mr. Mehran S. Beladi, P.E.
CH2M/G&R Joint Venture
800 South Orlando Avenue
Maitland, Florida 32751-5627

Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Jan Murray 04-15-98
(Clerk) (Date)

Orange County Solid Waste Department
Orange County Solid Waste Management Facility
Facility ID No.: 0950113
Orange County

Initial Title V Air Operation Permit
Final Permit No.: 0950113-001-AV

DEP Central District:
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

Title V Air Operation Permit
Orange County Solid Waste Department
Orange County Solid Waste Management Facility
FINAL Permit No.: 0950113-001-AV

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Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

Permittee:
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

FINAL Permit No.: 0950113-001-AV
Facility ID No.: 0950113
SIC Nos.: 24, 2421
Project: Orange County Solid Waste Facility

This permit is for the operation of the Orange County Solid Waste Facility located at 12100 Young Pine Road, Orlando, Orange County, Latitude: 28° 28' 52" North and Longitude: 81° 11' 30" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97)
Appendix B, 40 CFR 60 Subparts A and WWW,
Appendix TV-1, Title V Conditions (version dated 12/02/97)
Appendix D-1, Definitions for Subpart WWW - Municipal Solid Waste Landfills
Table 2-1, Summary of Monitoring Requirements for Municipal Solid Waste Landfills
Table 2-2, Summary of Recordkeeping Requirements for Municipal Solid Waste Landfills
Table 2-3, Summary of Compliance Requirements for Municipal Solid Waste Landfills

Renewal Application Due Date: August 28, 2001
Expiration Date: February 28, 2002

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

L. T. Kozlov, P.E.
Air Program Administrator

LTK/swe

Section I. Facility Information.

Subsection A. Facility Description.

This facility is engaged in the disposal of municipal solid waste.

Based on the Title V permit application received June 14, 1996, this is not a major source of Hazardous Air Pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:
Initial Title V Permit Application received June 14, 1996.

Additional information request dated September 17, 1997.

Additional information received September 29, 1997.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. The permittee shall submit all applications, tests, reports, notifications, or other submittals required by this permit to the Orange County Environmental Protection Department.

2. APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97), is a part of this permit. APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.

3. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

4. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

5. **Not federally enforceable.** Unconfined Emissions of Particulate Matter.
No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

   Reasonable precautions include:
   a) Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   b) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   c) Landscaping or planting of vegetation.
   d) Other techniques, as necessary.
   [Rule 62-296.320(4)(c) F.A.C.]

6. Test Notification: Unless otherwise specified in this permit, the air compliance section of the Central District office shall be notified in writing of expected compliance test dates at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.
[Rule 62-297.340(1) F.A.C.]

7. **Not Federally Enforceable.** When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

8. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District Office:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

9. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

10. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

A2. This emission unit is subject to the following requirements from title 40 of the Code of Federal Regulations part 60 (see attached Appendix B):

40 CFR 60.7	**Notification and record keeping** (Appendix B page 1)
40 CFR 60.8	**Performance tests** (Appendix B page 1)
40 CFR 60.11	**Compliance with standards and maintenance requirements** (Appendix B page 2)
40 CFR 60.13	**Monitoring requirements** (Appendix B page 4)
40 CFR 60.14	**Modification**(Appendix B page 4)
40 CFR 60.15	**Reconstruction** (Appendix B page 6)
40 CFR 60.18	**General control device requirements** (Appendix B page 7)
40 CFR 60.752(b)	**Standards for air emissions from municipal solid waste landfills** (Appendix B page 9)
40 CFR 60.753	**Operational standards for collection and control systems** (Appendix B page 10)
40 CFR 60.754	**Test methods and procedures** (Appendix B page 12)
40 CFR 60.755	**Compliance provisions** (Appendix B page 15)
40 CFR 60.756	**Monitoring of operations** (Appendix B page 18)
40 CFR 60.757	**Reporting requirements** (Appendix B page 19)
40 CFR 60.758	**Record keeping requirements** (Appendix B page 22)
40 CFR 60.759	**Specifications for active collection systems** (Appendix B page 24)

APPENDIX B

60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

(1) A notification of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.
(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with § 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
(6) A notification of the anticipated date for conducting the opacity observations required by § 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by § 60.8 in lieu of Method 9 observation data as allowed by § 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

Section 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator

(1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,
(2) approves the use of an equivalent method,
(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance,
(4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or

(5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes

(I) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and

(ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

60.11 Compliance with standards and maintenance requirements.

(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in § 60.8 unless one of the following conditions apply. If no performance test under § 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under § 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in § 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be

necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under § 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in § 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by § 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and § 60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under § 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under § 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under § 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under § 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under § 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in § 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by § 60.8, the opacity observation results and observer certification required by § 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by § 60.8. If the Administrator finds that an affected facility is in compliance with all

applicable standards for which performance tests are conducted in accordance with § 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the FEDERAL REGISTER.

60.13 Monitoring requirements.

(c) If the owner or operator of an affected facility elects to submit continuos opacity monitoring system (COMS) data for compliance with the opacity standard as provided under § 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under § 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under § 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under § 60.8 and as described in § 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under § 60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP–42, or other emission factors determined by the Administrator to be superior to AP–42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be post-marked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

60.18 General control device requirements.

(a) Introduction. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f).

(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(4) (ii) and (iii).

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f) (1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T =Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

k = Constant

$$1.740 x 10^{-7}\left(\frac{1}{ppm}\right)\left(\frac{gmole}{scm}\right)\left(\frac{MJ}{kcal}\right)$$

where the standard temperature for (gmole/scm) is 20°C;

C_i =Concentration of sample component *i* in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 (Incorporated by reference as specified in § 60.17); and

H_i =Net heat of combustion of sample component i, kcal/ g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

V_{max} =Maximum permitted velocity, M/sec
28.8 =Constant
31.7 =Constant
H_T =The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

$V_{max}=8.706+0.7084\ (H_T)$
V_{max}=Maximum permitted velocity, m/sec
8.706=Constant

0.7084=Constant
H_T =The net heating value as determined in paragraph (f)(3).

Section 60.752(b) Standards for air emissions from municipal solid waste landfills.

Each owner or operator shall either comply with condition (2) below or calculate an NMOC emission rate for the landfill using the procedures specified in section 60.754 of this permit. The NMOC emission rate shall be recalculated annually, except as provided in condition 60.757(b)(1)(ii). When a landfill is closed, and either never needed control or meets the conditions for control system removal specified in condition 60.752(b)(2)(v), a Title V operating permit is no longer required.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
   (i) Submit an annual emission report to the Administrator, except as provided for in condition60.757(b)(1)(ii); and
   (ii)Recalculate the NMOC emission rate annually using the procedures specified in condition 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
      (A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with condition (2) below.
      (B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in condition 60.757(d).

(2) If a NMOC emission rate for the landfill, using the procedures specified in section 60.754 of this permit, has not been calculated or the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:
   (i) Submit a collection and control system design plan prepared by a professional engineer to the **Department of Environmental Protection, Central District Office, Air Program, on or before December 31, 1997.**
      (A) The collection and control system as described in the plan shall meet the design requirements of condition 60.752(b)(2)(ii) of this permit.
      (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods or procedures, compliance measures, monitoring or recordkeeping requirements, or reporting provisions, of sections 60.753 through 60.758 of this permit, proposed by the owner or operator.
      (C) The collection and control system design plan shall either conform with specifications for active collection systems in section 60.759 of this permit or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to section 60.759.
      (D) The Administrator shall review the information submitted under conditions (2)(i) (A),(B) and (C) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
   (ii) Install a collection and control system **within 18 months** of the submittal of the design plan under condition (2)(i) above that effectively captures the gas generated within the landfill.
      (A) An active collection system shall:
         (1)Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
         (2)Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
            (i) 5 years or more if active; or
            (ii)2 years or more if closed or at final grade;
         (3)Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

(1) Comply with the provisions specified in conditions (2)(ii)(A) (1), (2), and (4) above.

(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either of the following conditions (2)(iii) (A), (B) or (C).

(A) An open flare designed and operated in accordance with 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test, required under 40 CFR Sec. 60.8 using the test methods specified in condition 60.754(d) of this permit.

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in section 60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of condition (2)(iii) (A) or (B) above.

(iv) Operate the collection and control device installed to comply with this permit in accordance with the provisions of sections 60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (2)(v) (A), (B), and (C) below are met:

(A) The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of 40 CFR 258.60. A closure report shall be submitted to the Administrator as provided in condition 60.757(d) of this permit;

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in condition 60.754(b) of this permit, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
[Rule 62-204.800, F.A.C.; 40 CFR 60.752(b)]

Section 60.753 Operational standards for collection and control systems.

(a) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(a)]

(b) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in condition 60.757(f)(1);

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(b)]

(c) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above.
(2) Unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above, the oxygen shall be determined by an oxygen meter using Method 3A except that:
(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
(ii) A data recorder is not required;
(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
(iv) A calibration error check is not required;
(v) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(c)]

(d) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(d)]

(e) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with condition 60.755(b)(2)(iii) above. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(e)]

(f) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the control or treatment system at all times when the collected gas is routed to the system.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(f)]

(g) If monitoring demonstrates that the operational requirement in conditions (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in condition 60.755(a)(3) through (a)(5) or Sec. 60.755(c) of this permit. If corrective actions are taken as specified in section 60.755, the monitored exceedance is not a violation of the operational requirements in this section.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(g)]

Section 60.754 Test methods and procedures.

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in condition (a)(1)(i) below or the equation provided in condition (a)(1)(ii) below. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_oM_i\left(e^{-kt_i}\right)\left(C_{NMOC}\right)\left(3.6x10^{-9}\right)$$

where,

M_{NMOC}	= Total NMOC emission rate from the landfill, megagrams per year
k	= methane generation rate constant, $year^{-1}$
L_o	= methane generation potential, cubic meters per megagram solid waste
M_i	= mass of solid waste in the i^{th} section, megagrams
t_i	= age of the i^{th} section, years
C_{NMOC}	= concentration of NMOC, parts per million by volume as hexane
3.6×10^{-9}	= conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation provisions of condition 60.758(d)(2) are followed.

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_oR\left(e^{-kc} - e^{-kt}\right)\left(C_{NMOC}\right)\left(3.6x10^{-9}\right)$$

where,

M_{NMOC}	= mass emission rate of NMOC, megagrams per year
L_o	= methane generation potential, cubic meters per megagram solid waste
R	= average annual acceptance rate, megagrams per year
k	= methane generation rate constant, $year^{-1}$
t	= age of landfill, years
C_{NMOC}	= concentration of NMOC, parts per million by volume as hexane
c	= time since closure, years. For active landfill c = 0 and $e^{-kc} = 1$
3.6×10^{-9}	= conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R, if the documentation provisions of condition 60.758(d)(2) are followed.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(1)]

(2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(I) If the NMOC emission rate calculated in condition (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in condition 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under condition 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with condition 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in specific condition (a)(3) below.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(2)]

(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in condition (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in specific condition (a)(1) of this section.

(ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with condition 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in specific condition (a)(4) of this section.

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in condition 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(3)]

(4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of 40 CFR 60 Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in condition (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in condition (a)(3) of this section instead of the default values provided in condition (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with condition 60.752(b)(2).
(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in condition 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in condition 60.757(b)(1) using the equations in condition (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in condition (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained is used in all subsequent annual NMOC emission rate calculations.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(4)]

(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in conditions (a)(3) and (a)(4) of this section if the method has been approved by the Administrator as provided in condition 60.752(b)(2)(i)(B).
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(5)]

(b) After the installation of a collection and control system in compliance with section 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in condition 60.752(b)(2)(v), using the following equation:

$$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(1) The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of Section 4 of Method 2E of 40 CFR 60 Appendix A.
(2) The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator as provided in condition 60.752(b)(2)(i)(B).
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(b)]

(c) The owner or operator shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions in Sec. 60.752(b)(2) is already installed, the owner or operator shall estimate the NMOC emission rate using the procedures provided in condition (b) of this section.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(c)]

(d) For the performance test required in condition 60.752(b)(2)(iii)(B), Method 25 or Method 18 of 40 CFR 60 Appendix A shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by condition 60.752(b)(2)(i)(B). If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out}) / (NMOC_{in})$

where,

$NMOC_{in}$ = mass of NMOC entering control device
$NMOC_{out}$ = mass of NMOC exiting control device
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(d)]

Section 60.755 Compliance provisions.

Except as provided in condition 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with Sec. 60.752(b)(2)(ii).

(a)(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with condition 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in condition 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR(e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years
c = time since closure, years (for an active landfill c = 0 and $e^{-kc} = 1$)

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^{n} 2kL_oM_i\left(e^{-kt_i}\right)$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, year-1
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i^{th} section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in conditions (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in conditions (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(1)]

(2) For the purposes of determining sufficient density of gas collectors for compliance with condition 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or

other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(2)]

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with condition 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under condition 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(3)]

(4) Owners or operators are not required to install additional wells as required in specific condition (a)(3) of this section during the first 180 days after gas collection system start-up.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(4)]

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in condition 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(5)]

(6) An owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in section 60.759 of this permit shall provide information satisfactory to the Administrator as specified in condition 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(6)]

(b) For purposes of compliance with condition 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in condition 60.752(b)(2)(i). Each well shall be installed within 60 days of the date in which the initial solid waste has been in place for a period of:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(b)]

(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in condition 60.753(d).

(1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in condition (d) of this section.

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of 40 CFR 60 Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in conditions (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of condition 60.753(d).

(i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored within 10 calendar days of detecting the exceedance.

(iii) If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in condition (v) below shall be taken, and no further monitoring of that location is required until the action specified in condition (v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in condition (ii) or (iii) above shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in condition (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(c)]

(d) Each owner or operator seeking to comply with the provisions in condition 60.755(c) above shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in Section 3 of 40 CFR 60 Appendix A Method 21, except that ``methane" shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in Section 3.1.3 of Method 21, the instrument evaluation procedures of Section 4.4 of Method 21 shall be used.

(4) The calibration procedures provided in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(d)]

(e) The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(e)]

Section 60.756 Monitoring of operations.

(a) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer or other temperature measuring device at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in condition 60.755(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in condition 60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in condition 60.755(a)(5).

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A temperature monitoring device equipped with a continuous recorder and having an accuracy of $\pm$1 percent of the temperature being measured expressed in degrees Celsius or $\pm$0.5 °C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

(2) A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control device. The owner or operator shall either:

(I) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(2) A device that records flow to or bypass of the flare. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in condition 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to install a collection system that does not meet the specifications in Section 60.759 or seeking to monitor alternative parameters to those required by Section 60.753 through Section 60.756 shall provide information satisfactory to the Administrator as provided in conditions 60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(e)]

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in condition 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(f)]

Section 60.757 Reporting requirements.

(a) An amended design capacity report shall be submitted to the Administrator providing notification of any increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill above 2.5 million megagrams or 2.5 million cubic meters. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first.
[Rule 62-204.800, F.A.C.; 40 CFR 60.757(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the requirements of this subpart shall submit an annual NMOC emission rate report to the Administrator, except as provided

for in condition (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in condition 60.754(a) or (b), as applicable.

(i) NMOC emission rate reports shall be submitted annually, except as provided for in conditions (b)(1)(ii) and (b)(3) of this section.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of conditions (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with condition 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with Section 60.753 and Section 60.755.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of condition 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, in which the emission rate exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in condition 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in condition 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of condition 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with condition (d) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in condition 60.752(b)(2)(v) have been met.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(e)]

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a landfill seeking to comply with condition 60.752(b)(2) using an active collection system designed in accordance with condition 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under condition 60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under conditions 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under Section 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in condition 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to conditions (a)(3), (b), and (c)(4) of Section 60.755.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(f)]

(g) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(i) shall include the following information with the initial performance test report required under 40 CFR 60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
(6) The provisions for the control of off-site migration.
[Rule 62-204.800, F.A.C.; 40 CFR 60.757(g)]

Section 60.758 Recordkeeping requirements.

(a) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of condition 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
[Rule 62-204.800, F.A.C.; 40 CFR 60.758(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in conditions (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(ii):
(i) The maximum expected gas generation flow rate as calculated in condition 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in condition 60.759(a)(1).
(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:
(I) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
(ii) The percent reduction of NMOC determined as specified in condition 60.752(b)(2)(iii)(B) achieved by the control device.
(3) Where an owner or operator seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
[Rule 62-204.800, F.A.C.; 40 CFR 60.758(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Section 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under condition 60.757(f):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with condition 60.752(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under condition (b)(3)(i) of this section.

(2) Each owner or operator shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under Section 60.756.

(3) Each owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with condition 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this permit by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under condition 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under condition 60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in condition 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in condition 60.759(a)(3)(ii).

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in condition 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(e)]

Section 60.759 Specifications for active collection systems.

(a) Each owner or operator seeking to comply with condition 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in conditions 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall

be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in condition (a)(1) above shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in condition (a)(1) above shall control all gas producing areas, except as provided by conditions (a)(3)(i) and (a)(3)(ii) below.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under condition 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section

proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2kL_oM_i(e^{-kti})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

Q_i = NMOC emission rate from the i^{th} section, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of the degradable solid waste in the i^{th} section, megagram
t_i = age of the solid waste in the i^{th} section, years
C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume
3.6×10^{-9} = conversion factor

(iii) The values for k, L_o, and C_{NMOC} determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence. If field testing has not been performed, the default values for k, L_o and C_{NMOC} provided in condition 60.754(a)(1) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in condition (a)(3)(i) of this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(a)]

(b) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells

and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(b)]

(c) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with condition 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in condition (c)(2) below shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with condition 60.755(a)(1).

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(c)]

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Orange County Solid Waste Department **FINAL Permit No.:** 0950113-001-AV
Orange County Solid Waste Management Facility **Facility ID No.:** 0950113

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Stationary Petroleum Storage Tanks

2. Leachate Emissions

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Abbreviations and Acronyms:

°F: Degrees Fahrenheit
BACT: Best Available Control Technology
CFR: Code of Federal Regulations
DEP: State of Florida, Department of Environmental Protection
DARM: Division of Air Resource Management
EPA: United States Environmental Protection Agency
F.A.C.: Florida Administrative Code
F.S.: Florida Statute
ISO: International Standards Organization
LAT: Latitude
LONG: Longitude
MMBtu: million British thermal units
MW: Megawatt
ORIS: Office of Regulatory Information Systems
SOA: Specific Operating Agreement
UTM: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:	40	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213, F.A.C.]**

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:
AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by permit tracking database
001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321

Where:
PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC = old Air Construction Permit numbering

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. **Not federally enforceable.** General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.
[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

2. **Not federally enforceable.** Procedure to Obtain Permits; Application.
(1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
(2) All applications and supporting documents shall be filed in quadruplicate with the Department.
(3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
(4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
(5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
(c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
(d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
(e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
(6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
(7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.
[Rule 62-4.050, F.A.C.]

3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.
[Rule 62-4.070(7), F.A.C.]

4. Modification of Permit Conditions.

(1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:

(a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

(b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.

(c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.

(e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.

(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

6. Suspension and Revocation.

(1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.

(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.

(3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:

(a) Submitted false or inaccurate information in application or operational reports.

(b) Has violated law, Department orders, rules or permit conditions.

(c) Has failed to submit operational reports or other information required by Department rules.

(d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules.

[Rule 62-4.110, F.A.C.]

8. Transfer of Permits.
(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.
[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.
[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.
[Rule 62-4.150, F.A.C.]

12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
(1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
(2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
(3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

(4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

(5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

(6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

(7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

(a) Have access to and copy any records that must be kept under conditions of the permit;

(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

(c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

(8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of noncompliance; and,

(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

(9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

(10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

(12) This permit or a copy thereof shall be kept at the work site of the permitted activity.

(14) The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and,
6. the results of such analyses.

(15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

[Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.

(1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:

(a) A completed application on forms furnished by the Department.

(b) An engineering report covering:

1. plant description and operations,
2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
3. proposed waste control facilities,
4. the treatment objectives,
5. the design criteria on which the control facilities are based, and,
6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

(c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.

(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C.

[Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C.

[Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

(1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.

(2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.

(a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;

2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.

3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.

a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.

b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

(i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,

(ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,

(iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.

4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

19. **Not federally enforceable.** Notification of Startup. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.

(a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

(a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

(1) Public Notice of Proposed Agency Action.

(a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:

1. An air construction permit;

2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or

3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

(b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.

(2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.

(a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;

2. A 30-day period for submittal of public comments; and,

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.

(b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.

(d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.

(e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.

(f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.

(g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.

(h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:

1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.

2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.

(3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.

(a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,

2. A 30-day period for submittal of public comments.

(b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) The notice shall identify:

1. The facility;

2. The name and address of the office at which processing of the permit occurs;

3. The activity or activities involved in the permit action;

4. The emissions change involved in any permit revision;

5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;

6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;

7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

(1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

(a) Typographical errors noted in the permit;

(b) Name, address or phone number change from that in the permit;

(c) Any other similar minor administrative change at the source; and,

(d) A change requiring more frequent monitoring or reporting by the permittee.

(e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

(f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).

(2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.

(3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

(4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application.

[Rule 62-210.360, F.A.C.]

23. Reports.

(3) Annual Operating Report for Air Pollutant Emitting Facility.

(a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.

(c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

24. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.650, F.A.C.]

25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Application for Air Permit - Long Form, Form and Instructions.

(a) Acid Rain Part (Phase II), Form and Instructions.

1. Repowering Extension Plan, Form and Instructions.
2. New Unit Exemption, Form and Instructions.
3. Retired Unit Exemption, Form and Instructions.

(b) Reserved.

(5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions.

[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

26. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.
[Rules 62-213.205 and 62-213.900(1), F.A.C.]

27. Annual Emissions Fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
[Rule 62-213.205(1)(g), F.A.C.]

28. Annual Emissions Fee. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
[Rule 62-213.205(1)(j), F.A.C.]

29. Annual Emissions Fee. DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee.
[Rule 62-213.205(4), F.A.C.]

30. Air Operation Permit Fees. After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.
[Rule 62-213.205(5), F.A.C.]

31. Permits and Permit Revisions Required. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C.
[Rule 62-213.400, F.A.C.]

32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
[Rule 62-213.400(1), F.A.C.]

33. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
(1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
(2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
(a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
(b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
(c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
(3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
(a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
(b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
(4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
[Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

(1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:

(a) Does not violate any applicable requirement;

(b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;

(c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;

(d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.

(2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.

(3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.

(4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.

(5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.

(6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

(1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.

(a) Timely Application.

3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.

(b) Complete Application.

1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.

2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.

3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.

4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

36. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA.
[Rule 62-213.420(2), F.A.C.]

37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
[Rule 62-213.420(3), F.A.C.]

38. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[Rule 62-213.420(4), F.A.C.]

39. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.

b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

(1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:

(i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).

(ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

40. Insignificant Emissions Units or Pollutant-Emitting Activities.

(a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.

(b) An emissions unit or activity shall be considered insignificant if:

1. Such unit or activity would be subject to no unit-specific applicable requirement;

2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and

3. Such unit or activity would not emit or have the potential to emit:

a. 500 pounds per year or more of lead and lead compounds expressed as lead;

b. 1,000 pounds per year or more of any hazardous air pollutant;

c. 2,500 pounds per year or more of total hazardous air pollutants; or

d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

41. Permit Duration. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years.

[Rule 62-213.440(1)(a), F.A.C.]

42. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

[Rule 62-213.440(1)(b)2.a., F.A.C.]

43. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[Rule 62-213.440(1)(b)2.b., F.A.C.]

44. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.
[Rule 62-213.440(1)(b)3.a., F.A.C.]

45. Deviation from Permit Requirements Reports. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
[Rule 62-213.440(1)(b)3.b., F.A.C.]

46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(1)(b)3.c, F.A.C.]

47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect.
[Rule 62-213.440(1)(d)1., F.A.C.]

48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.
[Rule 62-213.440(1)(d)3., F.A.C.]

49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C.
[Rule 62-213.440(1)(d)4., F.A.C.]

50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.
[Rule 62-213.440(1)(d)5., F.A.C.]

51. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.
[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance, the actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(3), F.A.C.]

53. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.
[Rule 62-213.460, F.A.C.]

54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
(1) Major Air Pollution Source Annual Emissions Fee (AEF) Form.
[Rule 62-213.900(1), F.A.C.]

Chapter 62-256, F.A.C.

55. **Not federally enforceable.** Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.
[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

56. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
(1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
(2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
(3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
(4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.
[40 CFR 82; and, Chapter 62-281, F.A.C. **(Chapter 62-281, F.A.C., is not federally enforceable)**]

Chapter 62-296, F.A.C.

57. **Not federally enforceable until SIP approved.** Industrial, Commercial, and Municipal Open Burning Prohibited. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:

(a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or

(b) An emergency exists which requires immediate action to protect human health and safety; or

(c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

3. Reasonable precautions may include, but shall not be limited to the following:

a. Paving and maintenance of roads, parking areas and yards.

b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.

d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.

e. Landscaping or planting of vegetation.

f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

g. Confining abrasive blasting where possible.

h. Enclosure or covering of conveyor systems.

4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

[electronic file name: tv-1.doc]

Definitions for Subpart WWW - Municipal Solid Waste Landfills

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under Sec. 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of Sec. 258.60 of this title.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time either (1) A notification of intent to install a collection and control system or (2) A collection and control system design plan is submitted in compliance with Sec. 60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as specified in the construction or operating permit issued by the State, local, or Tribal agency responsible for regulating the landfill.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under Sec. 257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Municipal solid waste landfill or *MSW landfill* means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (Sec. 257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or *MSW landfill emissions* means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of Sec. 60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS

Equipment	Monitoring Action	Schedule	Reference
Gas Collection System	Monitor gauge pressure within each gas extraction well. A negative value indicates a well is operating with a sufficient gas extraction rate.	Monthly	§60.756(a)(1)
	Monitor nitrogen concentration using Method 3C or oxygen concentration using Method 3A. Nitrogen concentration values <20 percent or oxygen cocentration values < 5 percent indicate well extraction rates are not causing excessive air infiltration into the landfill.	Monthly	§60.756(a)(2)
	Monitor LFG temperature in extraction well; should be <55°C (131°F), unless otherwise demonstrated that a higher temperature is appropriate. An elevated LFG temperature is an indicator of subsurface fires and aerobic conditions within the landfill.	Monthly	§60.756(a)(3)
	Monitor methane concentration at the landfill surface. Values <500 ppm above background indicate well extraction rates are sufficient to minimize the amount of LFG seeping out of the landfill.	Quarterly OR Skip Method[a]	§60.775(c) and §60.756(f)
	For an alternative gas collection system design, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(e)

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Equipment	Monitoring Action	Schedule	Reference
Gas Control System	Monitor gas flow from collection system to the enclosed combustion device (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration). This requirement identifies periods when gas flow has been diverted from the control device.	At least once every 15 minutes OR Monthly inspections of bypass line seals	§60.756(b)(2)
	Monitor gas flow from collection system to open flare (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration). This requirement identifies periods when gas flow has been diverted from the control device.	At least once every 15 minutes OR Monthly inspections of bypass line seals	§60.756(c)(2)
	Monitor combustion temperature of the enclosed combustion device with a temperature monitoring device equipped with a continuous recorder. (Temperature monitoring is not required for a boiler or process heater >44 megawatts) This requirement identifies operational and performance status of control device.	Continuous	§60.756(b)(1)
	Monitor the continuous presence of a pilot flame or the flare flame for an open flare. This requirement confirms operational status of control device.	Continuous	§60.756(c)(1)

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Equipment	Monitoring Action	Schedule	Reference
Gas Control System (continued)	For an alternative control device, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(d)

[a] When monitoring of methane concentration for a closed landfill shows no exceedances for three consecutive quarterly monitoring periods, then monitoring can be "skipped" to annual monitoring. Any exceedance of the 500 ppm methane standard returns the landfill to quarterly monitoring.

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS

Operation	Recordkeeping Item	Reference
Landfill and Control System Design	Current maximum design capacity, current amount of refuse-in-place, and year-by-year refuse accumulation rates	§60.758(a)
	Plot map showing each existing and planned well in the gas collection system. Provide unique identifying labels for each well.	§60.758(d)
	Installation date and location of all newly installed wells per §60.755(b).	§60.758(d)(1)
	Description, location, amount, and placement date of all nondegradable refuse including asbestos and demolition refuse placed in landfill areas which are excluded from LFG collection and control.	§60.758(d)(2)
Monitored Operating Parameters for Gas Collection and Control Systems	(1) Gauge pressure in each extraction well, (2) Nitrogen or oxygen concentration in (3) Temperature of extracted LFG. (4) Methane concentrations along landfill surface. (5) Gas flow from collection system to the BDT control device (or seal bypass lines and inspect seals). (6) Combustion temperature of an enclosed combustion device or the continuous for an open flare. (7) Operating parameters for alternative collection and control system designs, which are specified by the landfill and approved by the implementing agency.	§60.758(c)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Measurements From Initial Performance Test	Maximum expected gas generation flow rate	§60.758(b)(1)(i)
	Density of wells, horizontal collectors, surface collectors, or other gas extraction devices.	§60.758(b)(1)(ii)
	For enclosed combustion devices (except for boilers or process heaters with a heat input ≥44 MW [150 MMBtu/hr]):	
	(1) Average combustion temperature measured at least every 15 minutes and averaged over the performance test duration.	§60.758(b)(2)(i)
	(2) Percent reduction of NMOC's by the control device.	§60.758(b)(2)(ii)
	For boilers/process heaters (of any size):	
	Describe location where LFG is introduced into the boiler flame zone.	§60.758(b)(3)
	For open flares: (1) Type of flare (steam-, air-, or non-assisted), (2) All visible emission readings, (3) Heat content determination, (4) Gas flow rate or bypass measurements, (5) Exit velocity determinations, (6) Continuous pilot flame or flare flame monitoring, and (7) All periods when pilot flame or flare flame is absent.	§60.758(b)(4)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Gas Control System: Periods When Operating Parameters Exceeded Limits Set by Most Recent Performance Test	For enclosed combustion devices (except for boilers/process heaters with a heat input ≥44 MW [150 MMBtu/hr]): Records of all 3-hour periods in which the average combustion temperature was more than 28°C (50°F) below the average combustion temperature measured during the most recent performance test.	§60.758(c)(1)(i)
	For boilers/process heaters with a heat input ≥44 MW (150 MMBtu/hr): Document all periods of operation by recording parameters, such as steam use, fuel use, or other specified parameters required by other regulatory agencies.	§60.758(c)(3)
	For boilers/process heaters: Document any changes to the location where collected LFG is introduced in the boiler flame zone.	§60.758(c)(1)(ii)
	For an open flare: Record all pilot flame or flare flame monitoring data and all periods when pilot flame or flare flame was absent.	§60.758(c)(4)
	Records of continuous flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines.	§60.758(c)(2)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Gas Collection and Control System: Exceedances of operational standards	Record all values which exceed the operational standards specified in §60.753. Also include the operating value from the next monitoring period and the location of each exceedance: (1) New well installation, (2) Pressure in each extraction well, (3) Nitrogen concentration or oxygen concentration in extracted LFG, (4) Temperature of extracted LFG, (5) Methane concentrations along landfill surface, (6) Collected LFG is routed to control device at all times, note periods when the collection system and/or control device were not operational.	§60.758(e)

TABLE 2-3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS

Report or Action	Schedule	Reference
Initial Design Capacity Report	Submit report according to whichever of the following deadlines occurs first: (1) 90 days after receiving construction or operating permit, OR (2) 30 days after construction or reconstruction starts, OR (3) 30 days after initial acceptance of refuse.	§60.757(a)
Amended Design Capacity Report	If design capacity is increased to a value that equals or exceeds 2.5 million Mg, the landfill must submit an Amended Design Capacity Report. Submit report 90 days after receiving modified permit, using additional land, or increasing maximum design capacity of landfill, whichever occurs first.	§60.757(a)(3)
Annual OR Five-Year[a] NMOC Emission Rate Report (Tier 1)	Submit initial report 90 days after initial acceptance of refuse. May submit with Initial Design Capacity Report. Repeat either once a year OR once every 5 years.	§60.757(b)
Revised NMOC Emission Rate Report (Tier 2)	If Tier 1 analysis results in NMOC emissions ≥50 Mg/yr, a revised NMOC emission rate report using data gathered from Tier 2 analysis can be submitted within 180 days of the initial calculated exceedance.	§60.757(c)(1)
Revised NMOC Emission Rate Report (Tier 3)	If Tier 2 analysis results in NMOC emissions ≥50 Mg/yr, a revised NMOC Emission Rate Report using data gathered from Tier 3 analysis can be submitted within 1 year of the initial calculated exceedance.	§60.757(c)(2)

TABLE 2-3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Report or Action	Schedule	Reference
Collection and Control System Design Plan	Within 1 year after submitting NMOC Emission Rate Report with a value ≥50 Mg/yr. Plans must gain Agency approval prior to installation.	§60.757(c)
Emission Control System Start-up	Control system based on approved design will startup within 18 months after submitting design plan.	§60.752(b)(2)(ii)
Initial Control System Performance Test Report	Submit report within 180 days of emission collection and control system start-up per §60.8. Results can be included in the initial Annual Report.	§60.757(f) §60.757(g)
Annual Compliance Report	Submit initial report within 180 days of emission collection and control system start-up. Report once every 12 months.	§60.757(f) §60.757(g)
Landfill Closure Report	When landfill is no longer accepting refuse and the landfill is considered closed. Submit report within 30 days of refuse acceptance cessation.	§60.757(d)
Control Equipment Removal Report	Submit report within 30 days prior to removal or cessation of control system operations. Controls can be removed after meeting all of these criteria: (1) Landfill Closure Report has been submitted, (2) Control system was operated for at least 15 years, and (3) Three consecutive NMOC Emission Rate Reports with values <50 Mg/yr achieved.	§60.757(e)

a The owner/operator may elect to submit an estimate of the NMOC emission rate for the next 5 years in lieu of the annual report if the estimated NMOC emission rate is <50 Mg/yr in each of the 5 years.

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

February 17, 1998

Certified Mail
P 183 848 995

Mr. Michael L. Chandler, Manager
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

Re: DRAFT Title V Permit No.: 0950113-001-AV
Orange County Public Utilities

Dear Mr. Chandler:

One copy of the "PROPOSED PERMIT DETERMINATION" for Orange County Solid Waste Management Facility, located at 12100 Young Pine Road, Orlando, Orange County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is *http://www.dep.state.fl.us/air*.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you have any other questions, please contact Alan Zahm at 407/894-7555.

Sincerely,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

63

LTK/azt
Enclosures
copy furnished to:
Mr. Mehran S. Beladi, P.E. (CH2M/G&R Joint Venture)
Anna Hacha-Long, OCEPD
Bruce Mitchell, DARM, BAR, Title V Section
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 0950113-001-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to the Orange County Solid Waste Management Facility located at 12100 Young Pine Road, Orlando, Orange County was clerked on December 29, 1997. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Orlando Sentinel on January 8, 1998. The DRAFT Title V Air Operation Permit was available for public inspection at the permitting authority's office in Orlando. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on January 11, 1998.

II. Public Comment(s).

No comments were received during the 30 (thirty) day public comment period. Since no comments were received, the DRAFT Title V Air Operation Permit becomes the PROPOSED Title V Air Operation Permit.

III. Conclusion.

(1) Since there were no comments received during the Public Notice period, no changes were made to the DRAFT Title V Permit and the permitting authority hereby issues the PROPOSED Permit No.: 0950113-001-AV.

Orange County Solid Waste Department
Orange County Solid Waste Management Facility
Facility ID No.: 0950113
Orange County

Initial Title V Air Operation Permit
PROPOSED Permit No.: 0950113-001-AV

DEP Central District:
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

Title V Air Operation Permit
Orange County Solid Waste Department
Orange County Solid Waste Management Facility
PROPOSED Permit No.: 0950113-001-AV

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Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

Permittee:
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

PROPOSED Permit No.: 0950113-001-AV
Facility ID No.: 0950113
SIC Nos.: 24, 2421
Project: Orange County Solid Waste Facility

This permit is for the operation of the Orange County Solid Waste Facility located at located at 12100 Young Pine Road, Orlando, Orange County, Latitude: 28° 28' 52" North and Longitude: 81° 11' 30" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97)
Appendix B, 40 CFR 60 Subparts A and WWW,
Appendix I-1, List of Insignificant Emissions Units and/or Activities,
Appendix TV-1, Title V Conditions (version dated 12/02/97)
Appendix D-1, Definitions for Subpart WWW - Municipal Solid Waste Landfills
Table 2-1, Summary of Monitoring Requirements for Municipal Solid Waste Landfills
Table 2-2, Summary of Recordkeeping Requirements for Municipal Solid Waste Landfills
Table 2-3, Summary of Compliance Requirements for Municipal Solid Waste Landfills

Effective Date:
Renewal Application Due Date: August 28, 2001
Expiration Date: February 28, 2002

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

LTK/azt

Section I. Facility Information.

Subsection A. Facility Description.

This facility is engaged in the disposal of municipal solid waste.

Based on the Title V permit application received June 14, 1996, this is not a major source of Hazardous Air Pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:
Initial Title V Permit Application received June 14, 1996.

Additional information request dated September 17, 1997.

Additional information received September 29, 1997.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. The permittee shall submit all applications, tests, reports, notifications, or other submittals required by this permit to the Orange County Environmental Protection Department.

2. APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97), is a part of this permit. APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.

3. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

4. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

5. **Not federally enforceable.** Unconfined Emissions of Particulate Matter.
No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

   Reasonable precautions include:
   a) Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   b) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   c) Landscaping or planting of vegetation.
   d) Other techniques, as necessary.
   [Rule 62-296.320(4)(c) F.A.C.]

6. Test Notification: Unless otherwise specified in this permit, the air compliance section of the Central District office shall be notified in writing of expected compliance test dates at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. [Rule 62-297.340(1) F.A.C.]

7. **Not Federally Enforceable**. When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

8. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District Office:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

9. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

A2. This emission unit is subject to the following requirements from title 40 of the Code of Federal Regulations part 60 (see attached Appendix B):

40 CFR 60.7	**Notification and record keeping** (Appendix B page 1)
40 CFR 60.8	**Performance tests** (Appendix B page 1)
40 CFR 60.11	**Compliance with standards and maintenance requirements** (Appendix B page 2)
40 CFR 60.13	**Monitoring requirements** (Appendix B page 4)
40 CFR 60.14	**Modification**(Appendix B page 4)
40 CFR 60.15	**Reconstruction** (Appendix B page 6)
40 CFR 60.18	**General control device requirements** (Appendix B page 7)
40 CFR 60.752(b)	**Standards for air emissions from municipal solid waste landfills** (Appendix B page 9)
40 CFR 60.753	**Operational standards for collection and control systems** (Appendix B page 10)
40 CFR 60.754	**Test methods and procedures** (Appendix B page 12)
40 CFR 60.755	**Compliance provisions** (Appendix B page 15)
40 CFR 60.756	**Monitoring of operations** (Appendix B page 18)
40 CFR 60.757	**Reporting requirements** (Appendix B page 19)
40 CFR 60.758	**Record keeping requirements** (Appendix B page 22)
40 CFR 60.759	**Specifications for active collection systems** (Appendix B page 24)

STATEMENT OF BASIS

Orange County Solid Waste Department
Orange County Solid Waste Management Facility
Facility ID No.: 0950113
Orange County

Initial Title V Air Operation Permit
PROPOSED Permit No.: 0950113-001-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Orange County Solid Waste Management Facility, located on Young Pine Road in southeast Orange County, serves the solid waste needs of the unincorporated areas of the County, and a majority of the incorporated municipalities (all incorporated areas except the cities of Maitland, Winter Park, and a portion of Apopka).

The Orange County Solid Waste Management Facility has a permitted capacity of more than 2.5 Million megagrams and is subject to new source performance standards (NSPS) [40 CFR 60 subpart WWW regulations]. The existing Facility covers approximately 1,500 acres and borders the Orange County Eastern Regional Wastewater Treatment Facility to the north, the Orlando Utilities Commission (OUC) Stanton Power Plant to the east, State Road 528 to the south, and private properties to the west. In anticipation of future solid waste needs of the community, the County has acquired approximately 3,500 acres of adjoining properties for future expansion and further development of the existing 1,500 acre Solid Waste Management Facility

The Facility currently operates: a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8); a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; an household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities. The closed landfills areas consist of: (a) 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents; and (b) The pre-1985 closed fill areas which covers approximately 340-acres. The pre-1985 closed areas of the Landfill were generally filled using the trench method of disposal, and are comparatively lower than the other disposal areas of the site. This has allowed the County to develop Class III landfills in these areas.

Based on the initial Title V permit application received March 13, 1997, this facility is not a major source of hazardous air pollutants (HAPs).

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Orange County Solid Waste Department
Orange County Solid Waste Management Facility

Proposed Permit No.: 0950113-001-AV
Facility ID No.: 0950113

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Stationary Petroleum Storage Tanks

2. Leachate Emissions

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Abbreviations and Acronyms:

°F: Degrees Fahrenheit
BACT: Best Available Control Technology
CFR: Code of Federal Regulations
DEP: State of Florida, Department of Environmental Protection
DARM: Division of Air Resource Management
EPA: United States Environmental Protection Agency
F.A.C.: Florida Administrative Code
F.S.: Florida Statute
ISO: International Standards Organization
LAT: Latitude
LONG: Longitude
MMBtu: million British thermal units
MW: Megawatt
ORIS: Office of Regulatory Information Systems
SOA: Specific Operating Agreement
UTM: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:	40	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213, F.A.C.]**

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:
AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by permit tracking database
001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321
Where:
PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC = old Air Construction Permit numbering

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS

Equipment	Monitoring Action	Schedule	Reference
Gas Collection System	Monitor gauge pressure within each gas extraction well. A negative value indicates a well is operating with a sufficient gas extraction rate.	Monthly	§60.756(a)(1)
	Monitor nitrogen concentration using Method 3C or oxygen concentration using Method 3A. Nitrogen concentration values <20 percent or oxygen cocentration values < 5 percent indicate well extraction rates are not causing excessive air infiltration into the landfill.	Monthly	§60.756(a)(2)
	Monitor LFG temperature in extraction well; should be <55°C (131°F), unless otherwise demonstrated that a higher temperature is appropriate. An elevated LFG temperature is an indicator of subsurface fires and aerobic conditions within the landfill.	Monthly	§60.756(a)(3)
	Monitor methane concentration at the landfill surface. Values <500 ppm above background indicate well extraction rates are sufficient to minimize the amount of LFG seeping out of the landfill.	Quarterly OR Skip Method[a]	§60.775(c) and §60.756(f)
	For an alternative gas collection system design, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(e)

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Equipment	Monitoring Action	Schedule	Reference
Gas Control System	Monitor gas flow from collection system to the enclosed combustion device (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration). This requirement identifies periods when gas flow has been diverted from the control device.	At least once every 15 minutes OR Monthly inspections of bypass line seals	§60.756(b)(2)
	Monitor gas flow from collection system to open flare (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration). This requirement identifies periods when gas flow has been diverted from the control device.	At least once every 15 minutes OR Monthly inspections of bypass line seals	§60.756(c)(2)
	Monitor combustion temperature of the enclosed combustion device with a temperature monitoring device equipped with a continuous recorder. (Temperature monitoring is not required for a boiler or process heater >44 megawatts) This requirement identifies operational and performance status of control device.	Continuous	§60.756(b)(1)
	Monitor the continuous presence of a pilot flame or the flare flame for an open flare. This requirement confirms operational status of control device.	Continuous	§60.756(c)(1)

TABLE 2-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Equipment	Monitoring Action	Schedule	Reference
Gas Control System (continued)	For an alternative control device, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(d)

[a] When monitoring of methane concentration for a closed landfill shows no exceedances for three consecutive quarterly monitoring periods, then monitoring can be "skipped" to annual monitoring. Any exceedance of the 500 ppm methane standard returns the landfill to quarterly monitoring.

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS

Operation	Recordkeeping Item	Reference
Landfill and Control System Design	Current maximum design capacity, current amount of refuse-in-place, and year-by-year refuse accumulation rates	§60.758(a)
	Plot map showing each existing and planned well in the gas collection system. Provide unique identifying labels for each well.	§60.758(d)
	Installation date and location of all newly installed wells per §60.755(b).	§60.758(d)(1)
	Description, location, amount, and placement date of all nondegradable refuse including asbestos and demolition refuse placed in landfill areas which are excluded from LFG collection and control.	§60.758(d)(2)
Monitored Operating Parameters for Gas Collection and Control Systems	(1) Gauge pressure in each extraction well, (2) Nitrogen or oxygen concentration in (3) Temperature of extracted LFG. (4) Methane concentrations along landfill surface. (5) Gas flow from collection system to the BDT control device (or seal bypass lines and inspect seals). (6) Combustion temperature of an enclosed combustion device or the continuous for an open flare. (7) Operating parameters for alternative collection and control system designs, which are specified by the landfill and approved by the implementing agency.	§60.758(c)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Measurements From Initial Performance Test	Maximum expected gas generation flow rate	§60.758(b)(1)(i)
	Density of wells, horizontal collectors, surface collectors, or other gas extraction devices.	§60.758(b)(1)(ii)
	For enclosed combustion devices (except for boilers or process heaters with a heat input ≥44 MW [150 MMBtu/hr]):	
	(1) Average combustion temperature measured at least every 15 minutes and averaged over the performance test duration.	§60.758(b)(2)(i)
	(2) Percent reduction of NMOC's by the control device.	§60.758(b)(2)(ii)
	For boilers/process heaters (of any size):	
	Describe location where LFG is introduced into the boiler flame zone.	§60.758(b)(3)
	For open flares: (1) Type of flare (steam-, air-, or non-assisted), (2) All visible emission readings, (3) Heat content determination, (4) Gas flow rate or bypass measurements, (5) Exit velocity determinations, (6) Continuous pilot flame or flare flame monitoring, and (7) All periods when pilot flame or flare flame is absent.	§60.758(b)(4)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Gas Control System: Periods When Operating Parameters Exceeded Limits Set by Most Recent Performance Test	For enclosed combustion devices (except for boilers/process heaters with a heat input ≥44 MW [150 MMBtu/hr]): Records of all 3-hour periods in which the average combustion temperature was more than 28°C (50°F) below the average combustion temperature measured during the most recent performance test.	§60.758(c)(1)(i)
	For boilers/process heaters with a heat input ≥44 MW (150 MMBtu/hr): Document all periods of operation by recording parameters, such as steam use, fuel use, or other specified parameters required by other regulatory agencies.	§60.758(c)(3)
	For boilers/process heaters: Document any changes to the location where collected LFG is introduced in the boiler flame zone.	§60.758(c)(1)(ii)
	For an open flare: Record all pilot flame or flare flame monitoring data and all periods when pilot flame or flare flame was absent.	§60.758(c)(4)
	Records of continuous flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines.	§60.758(c)(2)

TABLE 2-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Operation	Recordkeeping Item	Reference
Gas Collection and Control System: Exceedances of operational standards	Record all values which exceed the operational standards specified in §60.753. Also include the operating value from the next monitoring period and the location of each exceedance: (1) New well installation, (2) Pressure in each extraction well, (3) Nitrogen concentration or oxygen concentration in extracted LFG, (4) Temperature of extracted LFG, (5) Methane concentrations along landfill surface, (6) Collected LFG is routed to control device at all times, note periods when the collection system and/or control device were not operational.	§60.758(e)

TABLE 2-3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS

Report or Action	Schedule	Reference
Initial Design Capacity Report	Submit report according to whichever of the following deadlines occurs first: (1) 90 days after receiving construction or operating permit, OR (2) 30 days after construction or reconstruction starts, OR (3) 30 days after initial acceptance of refuse.	§60.757(a)
Amended Design Capacity Report	If design capacity is increased to a value that equals or exceeds 2.5 million Mg, the landfill must submit an Amended Design Capacity Report. Submit report 90 days after receiving modified permit, using additional land, or increasing maximum design capacity of landfill, whichever occurs first.	§60.757(a)(3)
Annual OR Five-Year[a] NMOC Emission Rate Report (Tier 1)	Submit initial report 90 days after initial acceptance of refuse. May submit with Initial Design Capacity Report. Repeat either once a year OR once every 5 years.	§60.757(b)
Revised NMOC Emission Rate Report (Tier 2)	If Tier 1 analysis results in NMOC emissions ≥50 Mg/yr, a revised NMOC emission rate report using data gathered from Tier 2 analysis can be submitted within 180 days of the initial calculated exceedance.	§60.757(c)(1)
Revised NMOC Emission Rate Report (Tier 3)	If Tier 2 analysis results in NMOC emissions ≥50 Mg/yr, a revised NMOC Emission Rate Report using data gathered from Tier 3 analysis can be submitted within 1 year of the initial calculated exceedance.	§60.757(c)(2)

TABLE 2-3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS (CONTINUED)

Report or Action	Schedule	Reference
Collection and Control System Design Plan	Within 1 year after submitting NMOC Emission Rate Report with a value ≥50 Mg/yr. Plans must gain Agency approval prior to installation.	§60.757(c)
Emission Control System Start-up	Control system based on approved design will startup within 18 months after submitting design plan.	§60.752(b)(2)(ii)
Initial Control System Performance Test Report	Submit report within 180 days of emission collection and control system start-up per §60.8. Results can be included in the initial Annual Report.	§60.757(f) §60.757(g)
Annual Compliance Report	Submit initial report within 180 days of emission collection and control system start-up. Report once every 12 months.	§60.757(f) §60.757(g)
Landfill Closure Report	When landfill is no longer accepting refuse and the landfill is considered closed. Submit report within 30 days of refuse acceptance cessation.	§60.757(d)
Control Equipment Removal Report	Submit report within 30 days prior to removal or cessation of control system operations. Controls can be removed after meeting all of these criteria: (1) Landfill Closure Report has been submitted, (2) Control system was operated for at least 15 years, and (3) Three consecutive NMOC Emission Rate Reports with values <50 Mg/yr achieved.	§60.757(e)

a The owner/operator may elect to submit an estimate of the NMOC emission rate for the next 5 years in lieu of the annual report if the estimated NMOC emission rate is <50 Mg/yr in each of the 5 years.

APPENDIX B

60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

(1) A notification of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.
(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with § 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
(6) A notification of the anticipated date for conducting the opacity observations required by § 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by § 60.8 in lieu of Method 9 observation data as allowed by § 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

Section 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator

(1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,
(2) approves the use of an equivalent method,
(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance,
(4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or

(5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes

(I) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and

(ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

60.11 Compliance with standards and maintenance requirements.

(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in § 60.8 unless one of the following conditions apply. If no performance test under § 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under § 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in § 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be

necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under § 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in § 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by § 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and § 60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under § 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under § 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under § 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under § 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under § 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in § 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by § 60.8, the opacity observation results and observer certification required by § 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by § 60.8. If the Administrator finds that an affected facility is in compliance with all

applicable standards for which performance tests are conducted in accordance with § 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the FEDERAL REGISTER.

60.13 Monitoring requirements.

(c) If the owner or operator of an affected facility elects to submit continuos opacity monitoring system (COMS) data for compliance with the opacity standard as provided under § 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under § 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under § 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under § 60.8 and as described in § 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under § 60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP–42, or other emission factors determined by the Administrator to be superior to AP–42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be post-marked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

60.18 General control device requirements.

(a) Introduction. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f).

(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(4) (ii) and (iii).

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f) (1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T =Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

k = Constant

$$1.740x10^{-7}\left(\frac{1}{ppm}\right)\left(\frac{gmole}{scm}\right)\left(\frac{MJ}{kcal}\right)$$

where the standard temperature for (gmole/scm) is 20°C;

C_i =Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 (Incorporated by reference as specified in § 60.17); and

H_i =Net heat of combustion of sample component i, kcal/ g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$Log_{10}(V_{max})=(H_T+28.8)/31.7$$

V_{max} =Maximum permitted velocity, M/sec
28.8 =Constant
31.7 =Constant
H_T =The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

$$V_{max}=8.706+0.7084(H_T)$$

V_{max}=Maximum permitted velocity, m/sec
8.706=Constant

0.7084=Constant
H_T =The net heating value as determined in paragraph (f)(3).

Section 60.752(b) Standards for air emissions from municipal solid waste landfills.

Each owner or operator shall either comply with condition (2) below or calculate an NMOC emission rate for the landfill using the procedures specified in section 60.754 of this permit. The NMOC emission rate shall be recalculated annually, except as provided in condition 60.757(b)(1)(ii). When a landfill is closed, and either never needed control or meets the conditions for control system removal specified in condition 60.752(b)(2)(v), a Title V operating permit is no longer required.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
  (i) Submit an annual emission report to the Administrator, except as provided for in condition60.757(b)(1)(ii); and
  (ii)Recalculate the NMOC emission rate annually using the procedures specified in condition 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
    (A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with condition (2) below.
    (B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in condition 60.757(d).

(2) If a NMOC emission rate for the landfill, using the procedures specified in section 60.754 of this permit, has not been calculated or the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:
  (i) Submit a collection and control system design plan prepared by a professional engineer to the **Department of Environmental Protection, Central District Office, Air Program, on or before December 31, 1997.**
    (A) The collection and control system as described in the plan shall meet the design requirements of condition 60.752(b)(2)(ii) of this permit.
    (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods or procedures, compliance measures, monitoring or recordkeeping requirements, or reporting provisions, of sections 60.753 through 60.758 of this permit, proposed by the owner or operator.
    (C) The collection and control system design plan shall either conform with specifications for active collection systems in section 60.759 of this permit or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to section 60.759.
    (D) The Administrator shall review the information submitted under conditions (2)(i) (A),(B) and (C) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
  (ii) Install a collection and control system **within 18 months** of the submittal of the design plan under condition (2)(i) above that effectively captures the gas generated within the landfill.
    (A) An active collection system shall:
      (1)Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
      (2)Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
        (i) 5 years or more if active; or
        (ii)2 years or more if closed or at final grade;
      (3)Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

(1) Comply with the provisions specified in conditions (2)(ii)(A) (1), (2), and (4) above.

(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either of the following conditions (2)(iii) (A), (B) or (C).

(A) An open flare designed and operated in accordance with 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test, required under 40 CFR Sec. 60.8 using the test methods specified in condition 60.754(d) of this permit.

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in section 60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of condition (2)(iii) (A) or (B) above.

(iv) Operate the collection and control device installed to comply with this permit in accordance with the provisions of sections 60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (2)(v) (A), (B), and (C) below are met:

(A) The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of 40 CFR 258.60. A closure report shall be submitted to the Administrator as provided in condition 60.757(d) of this permit;

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in condition 60.754(b) of this permit, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

[Rule 62-204.800, F.A.C.; 40 CFR 60.752(b)]

Section 60.753 Operational standards for collection and control systems.

(a) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(a)]

(b) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in condition 60.757(f)(1);

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(b)]

(c) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55° C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above.
(2) Unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above, the oxygen shall be determined by an oxygen meter using Method 3A except that:
(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
(ii) A data recorder is not required;
(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
(iv) A calibration error check is not required;
(v) The allowable sample bias, zero drift, and calibration drift are $\pm$10 percent.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(c)]

(d) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(d)]

(e) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with condition 60.755(b)(2)(iii) above. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(e)]

(f) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the control or treatment system at all times when the collected gas is routed to the system.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(f)]

(g) If monitoring demonstrates that the operational requirement in conditions (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in condition 60.755(a)(3) through (a)(5) or Sec. 60.755(c) of this permit. If corrective actions are taken as specified in section 60.755, the monitored exceedance is not a violation of the operational requirements in this section.
[Rule 62-204.800, F.A.C.; 40 CFR 60.753(g)]

Section 60.754 Test methods and procedures.

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in condition (a)(1)(i) below or the equation provided in condition (a)(1)(ii) below. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_o M_i \left(e^{-kt_i}\right)\left(C_{NMOC}\right)\left(3.6x10^{-9}\right)$$

where,

M_{NMOC}	= Total NMOC emission rate from the landfill, megagrams per year
k	= methane generation rate constant, $year^{-1}$
L_o	= methane generation potential, cubic meters per megagram solid waste
M_i	= mass of solid waste in the i^{th} section, megagrams
t_i	= age of the i^{th} section, years
C_{NMOC}	= concentration of NMOC, parts per million by volume as hexane
3.6×10^{-9}	= conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if the documentation provisions of condition 60.758(d)(2) are followed.

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_o R\left(e^{-kc} - e^{-kt}\right)\left(C_{NMOC}\right)\left(3.6x10^{-9}\right)$$

where,

M_{NMOC}	= mass emission rate of NMOC, megagrams per year
L_o	= methane generation potential, cubic meters per megagram solid waste
R	= average annual acceptance rate, megagrams per year
k	= methane generation rate constant, $year^{-1}$
t	= age of landfill, years
C_{NMOC}	= concentration of NMOC, parts per million by volume as hexane
c	= time since closure, years. For active landfill c = 0 and $e^{-kc} = 1$
3.6×10^{-9}	= conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R, if the documentation provisions of condition 60.758(d)(2) are followed.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(1)]

(2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(I) If the NMOC emission rate calculated in condition (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in condition 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under condition 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with condition 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in specific condition (a)(3) below.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(2)]

(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in condition (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in specific condition (a)(1) of this section.

(ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with condition 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in specific condition (a)(4) of this section.

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in condition 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(3)]

(4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of 40 CFR 60 Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in condition (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in condition (a)(3) of this section instead of the default values provided in condition (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with condition 60.752(b)(2).
(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in condition 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in condition 60.757(b)(1) using the equations in condition (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in condition (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained is used in all subsequent annual NMOC emission rate calculations.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(4)]

(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in conditions (a)(3) and (a)(4) of this section if the method has been approved by the Administrator as provided in condition 60.752(b)(2)(i)(B).
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(5)]

(b) After the installation of a collection and control system in compliance with section 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in condition 60.752(b)(2)(v), using the following equation:

$$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(1) The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of Section 4 of Method 2E of 40 CFR 60 Appendix A.
(2) The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator as provided in condition 60.752(b)(2)(i)(B).
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(b)]

(c) The owner or operator shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions in Sec. 60.752(b)(2) is already installed, the owner or operator shall estimate the NMOC emission rate using the procedures provided in condition (b) of this section.
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(c)]

(d) For the performance test required in condition 60.752(b)(2)(iii)(B), Method 25 or Method 18 of 40 CFR 60 Appendix A shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by condition 60.752(b)(2)(i)(B). If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out}) / (NMOC_{in})$

where,

$NMOC_{in}$ = mass of NMOC entering control device
$NMOC_{out}$ = mass of NMOC exiting control device
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(d)]

Section 60.755 Compliance provisions.

Except as provided in condition 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with Sec. 60.752(b)(2)(ii).

(a)(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with condition 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in condition 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR(e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
L_o = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, $year^{-1}$
t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years
c = time since closure, years (for an active landfill c = 0 and $e^{-kc} = 1$)

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^{n} 2kL_oM_i\left(e^{-kt_i}\right)$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, year-1
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i^{th} section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in conditions (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in conditions (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(1)]

(2) For the purposes of determining sufficient density of gas collectors for compliance with condition 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or

other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(2)]

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with condition 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under condition 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(3)]

(4) Owners or operators are not required to install additional wells as required in specific condition (a)(3) of this section during the first 180 days after gas collection system start-up.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(4)]

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in condition 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(5)]

(6) An owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in section 60.759 of this permit shall provide information satisfactory to the Administrator as specified in condition 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(6)]

(b) For purposes of compliance with condition 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in condition 60.752(b)(2)(i). Each well shall be installed within 60 days of the date in which the initial solid waste has been in place for a period of:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(b)]

(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in condition 60.753(d).

(1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in condition (d) of this section.

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of 40 CFR 60 Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in conditions (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of condition 60.753(d).

(i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored within 10 calendar days of detecting the exceedance.

(iii) If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in condition (v) below shall be taken, and no further monitoring of that location is required until the action specified in condition (v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in condition (ii) or (iii) above shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in condition (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(c)]

(d) Each owner or operator seeking to comply with the provisions in condition 60.755(c) above shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in Section 3 of 40 CFR 60 Appendix A Method 21, except that ``methane" shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in Section 3.1.3 of Method 21, the instrument evaluation procedures of Section 4.4 of Method 21 shall be used.

(4) The calibration procedures provided in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(d)]

(e) The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.
[Rule 62-204.800, F.A.C.; 40 CFR 60.755(e)]

Section 60.756 Monitoring of operations.

(a) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer or other temperature measuring device at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in condition 60.755(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in condition 60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in condition 60.755(a)(5).

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A temperature monitoring device equipped with a continuous recorder and having an accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or $\pm 0.5^{\circ}$ C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

(2) A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control device. The owner or operator shall either:

(I) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(2) A device that records flow to or bypass of the flare. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in condition 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to install a collection system that does not meet the specifications in Section 60.759 or seeking to monitor alternative parameters to those required by Section 60.753 through Section 60.756 shall provide information satisfactory to the Administrator as provided in conditions 60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(e)]

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in condition 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(f)]

Section 60.757 Reporting requirements.

(a) An amended design capacity report shall be submitted to the Administrator providing notification of any increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill above 2.5 million megagrams or 2.5 million cubic meters. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first.
[Rule 62-204.800, F.A.C.; 40 CFR 60.757(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the requirements of this subpart shall submit an annual NMOC emission rate report to the Administrator, except as provided

for in condition (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in condition 60.754(a) or (b), as applicable.

(i) NMOC emission rate reports shall be submitted annually, except as provided for in conditions (b)(1)(ii) and (b)(3) of this section.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of conditions (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with condition 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with Section 60.753 and Section 60.755.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of condition 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, in which the emission rate exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in condition 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in condition 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of condition 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with condition (d) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in condition 60.752(b)(2)(v) have been met.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(e)]

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a landfill seeking to comply with condition 60.752(b)(2) using an active collection system designed in accordance with condition 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under condition 60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under conditions 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under Section 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in condition 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to conditions (a)(3), (b), and (c)(4) of Section 60.755.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(f)]

(g) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(i) shall include the following information with the initial performance test report required under 40 CFR 60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
(6) The provisions for the control of off-site migration.
[Rule 62-204.800, F.A.C.; 40 CFR 60.757(g)]

Section 60.758 Recordkeeping requirements.

(a) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of condition 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
[Rule 62-204.800, F.A.C.; 40 CFR 60.758(a)]

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in conditions (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(ii):
(i) The maximum expected gas generation flow rate as calculated in condition 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in condition 60.759(a)(1).
(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:
(I) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
(ii) The percent reduction of NMOC determined as specified in condition 60.752(b)(2)(iii)(B) achieved by the control device.
(3) Where an owner or operator seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
[Rule 62-204.800, F.A.C.; 40 CFR 60.758(b)]

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Section 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under condition 60.757(f):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28° C below the average combustion temperature during the most recent performance test at which compliance with condition 60.752(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under condition (b)(3)(i) of this section.

(2) Each owner or operator shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under Section 60.756.

(3) Each owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with condition 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this permit by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under condition 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(c)]

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under condition 60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in condition 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in condition 60.759(a)(3)(ii).

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(d)]

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in condition 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(e)]

Section 60.759 Specifications for active collection systems.

(a) Each owner or operator seeking to comply with condition 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in conditions 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall

be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in condition (a)(1) above shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in condition (a)(1) above shall control all gas producing areas, except as provided by conditions (a)(3)(i) and (a)(3)(ii) below.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under condition 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section

proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2kL_oM_i(e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

Q_i = NMOC emission rate from the i^{th} section, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of the degradable solid waste in the i^{th} section, megagram
t_i = age of the solid waste in the i^{th} section, years
C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume
3.6×10^{-9} = conversion factor

(iii) The values for k, L_o, and C_{NMOC} determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence. If field testing has not been performed, the default values for k, L_o and C_{NMOC} provided in condition 60.754(a)(1) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in condition (a)(3)(i) of this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(a)]

(b) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells

and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(b)]

(c) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with condition 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in condition (c)(2) below shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with condition 60.755(a)(1).

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(c)]

Definitions for Subpart WWW - Municipal Solid Waste Landfills

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under Sec. 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of Sec. 258.60 of this title.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time either (1) A notification of intent to install a collection and control system or (2) A collection and control system design plan is submitted in compliance with Sec. 60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as specified in the construction or operating permit issued by the State, local, or Tribal agency responsible for regulating the landfill.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under Sec. 257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Municipal solid waste landfill or *MSW landfill* means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (Sec. 257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or *MSW landfill emissions* means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of Sec. 60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. **Not federally enforceable.** General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.
[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

2. **Not federally enforceable.** Procedure to Obtain Permits; Application.
(1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
(2) All applications and supporting documents shall be filed in quadruplicate with the Department.
(3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
(4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
(5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
(c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
(d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
(e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
(6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
(7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.
[Rule 62-4.050, F.A.C.]

3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.
[Rule 62-4.070(7), F.A.C.]

4. Modification of Permit Conditions.

(1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:

(a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

(b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.

(c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.

(e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.

(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

6. Suspension and Revocation.

(1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.

(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.

(3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:

(a) Submitted false or inaccurate information in application or operational reports.

(b) Has violated law, Department orders, rules or permit conditions.

(c) Has failed to submit operational reports or other information required by Department rules.

(d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules.

[Rule 62-4.110, F.A.C.]

8. Transfer of Permits.
(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.
[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.
[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.
[Rule 62-4.150, F.A.C.]

12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
(1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
(2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
(3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

(4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

(5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

(6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

(7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

(a) Have access to and copy any records that must be kept under conditions of the permit;

(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

(c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

(8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of noncompliance; and,

(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

(9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

(10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

(12) This permit or a copy thereof shall be kept at the work site of the permitted activity.

(14) The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and,
6. the results of such analyses.

(15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

[Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.

(1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:

(a) A completed application on forms furnished by the Department.

(b) An engineering report covering:

1. plant description and operations,
2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
3. proposed waste control facilities,
4. the treatment objectives,
5. the design criteria on which the control facilities are based, and,
6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

(c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.

(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C.

[Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C.

[Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

(1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.

(2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.

(a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;

2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.

3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.

a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.

b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

(i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,

(ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,

(iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.

4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

19. **Not federally enforceable.** Notification of Startup. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.

(a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

(a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

(1) Public Notice of Proposed Agency Action.

(a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:

1. An air construction permit;

2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or

3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

(b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.

(2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.

(a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;

2. A 30-day period for submittal of public comments; and,

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.

(b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.

(d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.

(e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.

(f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.

(g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.

(h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:

1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.

2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.

(3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.

(a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,

2. A 30-day period for submittal of public comments.

(b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) The notice shall identify:

1. The facility;

2. The name and address of the office at which processing of the permit occurs;

3. The activity or activities involved in the permit action;

4. The emissions change involved in any permit revision;

5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;

6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;

7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

(1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

(a) Typographical errors noted in the permit;

(b) Name, address or phone number change from that in the permit;

(c) Any other similar minor administrative change at the source; and,

(d) A change requiring more frequent monitoring or reporting by the permittee.

(e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

(f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).

(2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.

(3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

(4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application.

[Rule 62-210.360, F.A.C.]

23. Reports.

(3) Annual Operating Report for Air Pollutant Emitting Facility.

(a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.

(c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

24. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.650, F.A.C.]

25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Application for Air Permit - Long Form, Form and Instructions.

(a) Acid Rain Part (Phase II), Form and Instructions.

1. Repowering Extension Plan, Form and Instructions.
2. New Unit Exemption, Form and Instructions.
3. Retired Unit Exemption, Form and Instructions.

(b) Reserved.

(5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions.

[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

26. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.
[Rules 62-213.205 and 62-213.900(1), F.A.C.]

27. Annual Emissions Fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
[Rule 62-213.205(1)(g), F.A.C.]

28. Annual Emissions Fee. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
[Rule 62-213.205(1)(j), F.A.C.]

29. Annual Emissions Fee. DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee.
[Rule 62-213.205(4), F.A.C.]

30. Air Operation Permit Fees. After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.
[Rule 62-213.205(5), F.A.C.]

31. Permits and Permit Revisions Required. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C.
[Rule 62-213.400, F.A.C.]

32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
[Rule 62-213.400(1), F.A.C.]

33. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
(1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
(2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
(a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
(b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
(c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
(3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
(a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
(b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
(4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
[Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

(1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:

(a) Does not violate any applicable requirement;

(b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;

(c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;

(d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.

(2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.

(3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.

(4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.

(5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.

(6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

(1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.

(a) Timely Application.

3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.

(b) Complete Application.

1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.

2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.

3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.

4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

36. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA.
[Rule 62-213.420(2), F.A.C.]

37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
[Rule 62-213.420(3), F.A.C.]

38. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[Rule 62-213.420(4), F.A.C.]

39. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.

b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

(1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:

(i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).

(ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

40. Insignificant Emissions Units or Pollutant-Emitting Activities.

(a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.

(b) An emissions unit or activity shall be considered insignificant if:

1. Such unit or activity would be subject to no unit-specific applicable requirement;

2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and

3. Such unit or activity would not emit or have the potential to emit:

a. 500 pounds per year or more of lead and lead compounds expressed as lead;

b. 1,000 pounds per year or more of any hazardous air pollutant;

c. 2,500 pounds per year or more of total hazardous air pollutants; or

d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

41. Permit Duration. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years.

[Rule 62-213.440(1)(a), F.A.C.]

42. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

[Rule 62-213.440(1)(b)2.a., F.A.C.]

43. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[Rule 62-213.440(1)(b)2.b., F.A.C.]

44. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.
[Rule 62-213.440(1)(b)3.a., F.A.C.]

45. Deviation from Permit Requirements Reports. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
[Rule 62-213.440(1)(b)3.b., F.A.C.]

46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(1)(b)3.c, F.A.C.]

47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect.
[Rule 62-213.440(1)(d)1., F.A.C.]

48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.
[Rule 62-213.440(1)(d)3., F.A.C.]

49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C.
[Rule 62-213.440(1)(d)4., F.A.C.]

50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.
[Rule 62-213.440(1)(d)5., F.A.C.]

51. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.
[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance, the actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(3), F.A.C.]

53. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.
[Rule 62-213.460, F.A.C.]

54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
(1) Major Air Pollution Source Annual Emissions Fee (AEF) Form.
[Rule 62-213.900(1), F.A.C.]

Chapter 62-256, F.A.C.

55. **Not federally enforceable.** Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.
[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

56. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
(1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
(2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
(3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
(4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.
[40 CFR 82; and, Chapter 62-281, F.A.C. **(Chapter 62-281, F.A.C., is not federally enforceable)**]

Chapter 62-296, F.A.C.

57. **Not federally enforceable until SIP approved.** Industrial, Commercial, and Municipal Open Burning Prohibited. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:

(a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or

(b) An emergency exists which requires immediate action to protect human health and safety; or

(c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

3. Reasonable precautions may include, but shall not be limited to the following:

a. Paving and maintenance of roads, parking areas and yards.

b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.

d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.

e. Landscaping or planting of vegetation.

f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

g. Confining abrasive blasting where possible.

h. Enclosure or covering of conveyor systems.

4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

December 17, 1997

CERTIFIED MAIL
P 248 041 773

Mr. Michael L. Chandler, Manager
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

Re: DRAFT Title V Permit No.: 1270117-002-AV
Orange County Public Utilities

Dear Mr. Chandler:

One copy of the DRAFT Title V Air Operation Permit for the Orange County Solid Waste Management Facility, located at 12100 Young Pine Road, Orlando, Orange County, Florida, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" must be published as soon as possible upon receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Alan Zahm P.E., at the above letterhead address. If you have any other questions, please contact Scott Wesson at 407/893-3333.

Sincerely,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

LTK/sw
Enclosures

In the Matter of an
Application for Permit by:

Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067
Attention: Michael L. Chandler,
Manager

DRAFT Permit No.: 0950113-002-AV
Orange County Solid Waste Facility
Orange County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

The Florida Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit (copy of DRAFT Permit attached) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Orange County Solid Waste Department, applied on August 9, 1996, to the permitting authority for a Title V air operation permit for the Orange County Solid Waste Facility located at 12100 Young Pine Road, Orlando, Orange County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.0872, F.S., and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the permitting authority's office, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803, Telephone: 407/894-7555, Fax: 407/897-5963 within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the enclosed Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the

permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL 32399-3000, Telephone: 850/488-9730, Fax: 850/487-4938. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any other person must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, F.A.C.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner;

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
(c) Each rule or portion of a rule from which a variance or waiver is requested;
(d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
(e) The type of action requested;
(f) The specific facts that would justify a variance or waiver for the petitioner;
(g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

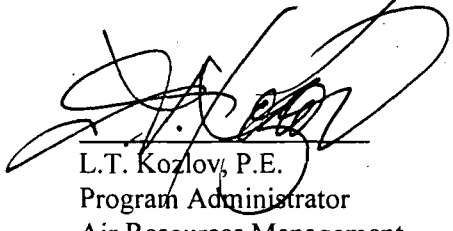
The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at U.S. EPA, 401 M. Street SW, Washington, D.C. 20460.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) and all copies were sent by certified mail before the close of business on 12-30-97 to the person(s) listed:

Michael L. Chandler, Manager
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) were sent by U.S. mail on the same date to the person(s) listed, or as otherwise noted:

Mr. Mehran S. Beladi, P.E.
CH2M/G&R Joint Venture
800 South Orlando Avenue
Maitland, Florida 32751-5627

Carla E. Pierce, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
Yolanda Adams, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Debra Jones 12/29/97
Clerk Date

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

Florida Department of Environmental Protection
Central District

Title V DRAFT Permit No.: 0950113-002-AV
Orange County Solid Waste Facility
Orange County

The Florida Department of Environmental Protection, Central District (permitting authority) gives notice of its intent to issue a Title V air operation permit to the Orange County Solid Waste Management Facility located at 12100 Young Pine Road, Orlando, Orange County, Florida. The facility consists of a municipal solid waste landfill that includes a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8), a closed landfill of 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents, a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; a household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities.. The applicant's name and address are: Orange County Solid Waste Department, 5901 Young Pine Road Orlando, Florida 32872-0067, to the attention of Michael L. Chandler, Manager.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the enclosed Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the permitting authority's office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, Telephone: 850/488-9730, Fax: 850/487-4938. Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at U.S. EPA, 401 M. Street SW, Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

The complete project file includes the Draft Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Alan Zahm P.E., at the above address, or call 407/893-3334, for additional information.

STATEMENT OF BASIS

Orange County Solid Waste Department
Orange County Solid Waste Management Facility
Facility ID No.: 0950113
Orange County

Initial Title V Air Operation Permit
DRAFT Permit No.: 0950113-001-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Orange County Solid Waste Management Facility, located on Young Pine Road in southeast Orange County, serves the solid waste needs of the unincorporated areas of the County, and a majority of the incorporated municipalities (all incorporated areas except the cities of Maitland, Winter Park, and a portion of Apopka).

The Orange County Solid Waste Management Facility has a permitted capacity of more than 2.5 Million megagrams and is subject to new source performance standards (NSPS) [40 CFR 60 subpart WWW regulations]. The existing Facility covers approximately 1,500 acres and borders the Orange County Eastern Regional Wastewater Treatment Facility to the north, the Orlando Utilities Commission (OUC) Stanton Power Plant to the east, State Road 528 to the south, and private properties to the west. In anticipation of future solid waste needs of the community, the County has acquired approximately 3,500 acres of adjoining properties for future expansion and further development of the existing 1,500 acre Solid Waste Management Facility

The Facility currently operates: a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8); a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; an household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities. The closed landfills areas consist of: (a) 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents; and (b) The pre-1985 closed fill areas which covers approximately 340-acres. The pre-1985 closed areas of the Landfill were generally filled using the trench method of disposal, and are comparatively lower than the other disposal areas of the site. This has allowed the County to develop Class III landfills in these areas.

Based on the initial Title V permit application received March 13, 1997, this facility is not a major source of hazardous air pollutants (HAPs).

Orange County Solid Waste Department
Orange County Solid Waste Management Facility
Facility ID No.: 0950113
Orange County

Initial Title V Air Operation Permit
Draft Permit No.: 0950113-001-AV

DEP Central District:
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

Title V Air Operation Permit
Orange County Solid Waste Department
Orange County Solid Waste Management Facility
DRAFT Permit No.: 0950113-001-AV

TABLE OF CONTENTS

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

Permittee:
Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

DRAFT Permit No.: 0950113-001-AV
Facility ID No.: 0950113
SIC Nos.: 24, 2421
Project: Orange County Solid Waste Facility

This permit is for the operation of the Orange County Solid Waste Facility located at located at 12100 Young Pine Road, Orlando, Orange County, Latitude: 28° 28' 52" North and Longitude: 81° 11' 30" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97)
Appendix B, 40 CFR 60 Subparts A and WWW,
Appendix TV-1, Title V Conditions (version dated 12/02/97)
Appendix D-1, Definitions for Subpart WWW - Municipal Solid Waste Landfills
Table 2-1, Summary of Monitoring Requirements for Municipal Solid Waste Landfills
Table 2-2, Summary of Recordkeeping Requirements for Municipal Solid Waste Landfills
Table 2-3, Summary of Compliance Requirements for Municipal Solid Waste Landfills

Effective Date:
Renewal Application Due Date: August 28, 2001
Expiration Date: February 28, 2002

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Len T. Kozlov, P.E.
Air Program Administrator

LTK/sw

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Section I. Facility Information.

Subsection A. Facility Description.

This facility is engaged in the disposal of municipal solid waste.

Based on the Title V permit application received June 14, 1996, this is not a major source of Hazardous Air Pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:
Initial Title V Permit Application received June 14, 1996.

Additional information request dated September 17, 1997.

Additional information received September 29, 1997.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. The permittee shall submit all applications, tests, reports, notifications, or other submittals required by this permit to the Orange County Environmental Protection Department.

2. APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97), is a part of this permit. APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.

3. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

4. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

5. **Not federally enforceable.** Unconfined Emissions of Particulate Matter.
No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

   Reasonable precautions include:
   a) Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   b) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   c) Landscaping or planting of vegetation.
   d) Other techniques, as necessary.
   [F.A.C. Rule 62-296.320(4)(c)]

6. Test Notification: Unless otherwise specified in this permit, the air compliance section of the Central District office shall be notified in writing of expected compliance test dates at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. [F.A.C. Rule 62-297.340(1)]

7. **Not Federally Enforceable.** When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

7. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District Office:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

9. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

A2. This emission unit is subject to the following requirements from title 40 of the Code of Federal Regulations part 60 (see attached Appendix B):

40 CFR 60.7	**Notification and record keeping.**(Appendix B page 1)
40 CFR 60.8	**Performance tests** (Appendix B page 1)
40 CFR 60.11	**Compliance with standards and maintenance requirements** (Appendix B page 2)
40 CFR 60.13	**Monitoring requirements** (Appendix B page 4)
40 CFR 60.14	**Modification**(Appendix B page 4)
40 CFR 60.15	**Reconstruction** (Appendix B page 6)
40 CFR 60.18	**General control device requirements** (Appendix B page 7)
40 CFR 60.752(b)	**Standards for air emissions from municipal solid waste landfills** (Appendix B page 9)
40 CFR 60.753	**Operational standards for collection and control systems** (Appendix B page 10)
40 CFR 60.754	**Test methods and procedures** (Appendix B page 12)
40 CFR 60.755	**Compliance provisions** (Appendix B page 15)
40 CFR 60.756	**Monitoring of operations** (Appendix B page 18)
40 CFR 60.757	**Reporting requirements** (Appendix B page 19)
40 CFR 60.758	**Record keeping requirements** (Appendix B page 22)
40 CFR 60.759	**Specifications for active collection systems** (Appendix B page 24)

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road ▪ Orlando, Florida 32829
407-836-6600 ▪ Fax 407-836-6629

TJM
1-10-05

December 21, 2004

RECEIVED
JAN 06 2005
Central Dist. - DEP

Mr. Tom Mulligan
Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

RE: Orange County Landfill Third Quarter 2004 Surface Emissions Monitoring (SEM) Report (Permit No. 0950113-001-AV)

Dear Mr. Mulligan:

Please find attached two copies of the above referenced report. The SEM field monitoring and written report were completed by SCS Field Services, Inc.

If you have any questions or comments, please call Dan Morrical, P.E. at 407-836-6654.

Sincerely,

James W. Becker
Manager

JB/mr

Attachments: Quarterly Surface Methane Emissions Monitoring Reports for Orange County Landfill

c: Caroline Shine, Environmental Manager, Air Enforcement/ Monitoring, FDEP [Orlando]
Teresa Remudo-Fries, P.E., Deputy Director, Orange County Utilities Department
Anthony J. Cotter, Assistant County Attorney, Orange County Attorney's Office
Dan Morrical, P.E., Chief Engineer, Orange County Utilities-Solid Waste Division
Mike Rogers, Environmental Specialist, Orange County Utilities-Solid Waste Division
James W. Flynt, Jr., P.E., Sr. Engineer, Orange County Utilities-Solid Waste Division
Stanley J. Keely, P.E., WCG Inc. [Maitland, FL]
David H. Penoyer, P.E., SCS Engineers [Tampa, FL]
John Sullivan, SCS Field Services [Tampa, FL]

Environmental Consultants

3012 U.S. Highway 301 No
Suite 700
Tampa, FL 33619-2242

813 630-2109
FAX 813 630-1790
www.scsengineers.com

SCS FIELD SERVICES

November 30, 2004
File No. 07203090.02

Mr. James Flynt, P.E.
Orange County Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Subject: Surface Emission Monitoring (SEM) Third Quarter 2004
Orange County Solid Waste Management Facility, Orange County, Florida
Permit No. 0950113-001-AV

Dear Jim:

On September 23 and 24, and October 23, 2004, SCS Field Services (SCS-FS) conducted the Third Quarter SEM and required re-checks of exceedance areas at the subject landfill, as specified in facility's Title V permit, and the requirements of 40 CFR 60.755 (c) and (d), and 40 CFR 60, Appendix A, Method 21.

A total of 926 points were tested for emissions of volatile organic compounds (VOC), as methane, using a Foxboro TVA-1000B flame ionization detector. The calibration and Precision Data and Calculation Forms, Background Methane Concentration Data and Calculation Forms, and the Surface Methane Concentration Data Forms are attached.

Over the area surveyed, there were two exceedances on Cell 7B, and no exceedances on Cells A-K, the Pre-1985 landfill, and the Class III landfill. The first exceedance area (S-1) was remediated by tightening a cap on a 4-inch clean-out riser. The second exceedance area was remediated by welding a patch over a 2-inch hole in the cap's liner.

The 10-day and the 30-day re-checks of the exceedance areas were below 500 ppm VOC. Per the regulations, no further rechecks are required.

SCS Field Services appreciates the opportunity to provide this service. Call us if you have any questions or need additional information.

Sincerely,

David H. Penoyer, P.E.
Project Manager
SCS ENGINEERS

John R. Sullivan
Project Manager
SCS FIELD SERVICES

Attachments

Calibration Precision Data and Calculation Form

Date: 9/23/2004 (Testing started and completed) **Cell 7B/8 (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 9/23/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.87	510.00	509.13	1.13
2	1.06	511.00	509.94	1.94
3	0.98	509.00	508.02	0.02

Average = $\Sigma(D - A) \div 3$ = 1.03 = **E**

Calibration Precision = E ÷ A x 100= 0.20%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 9/23/2004

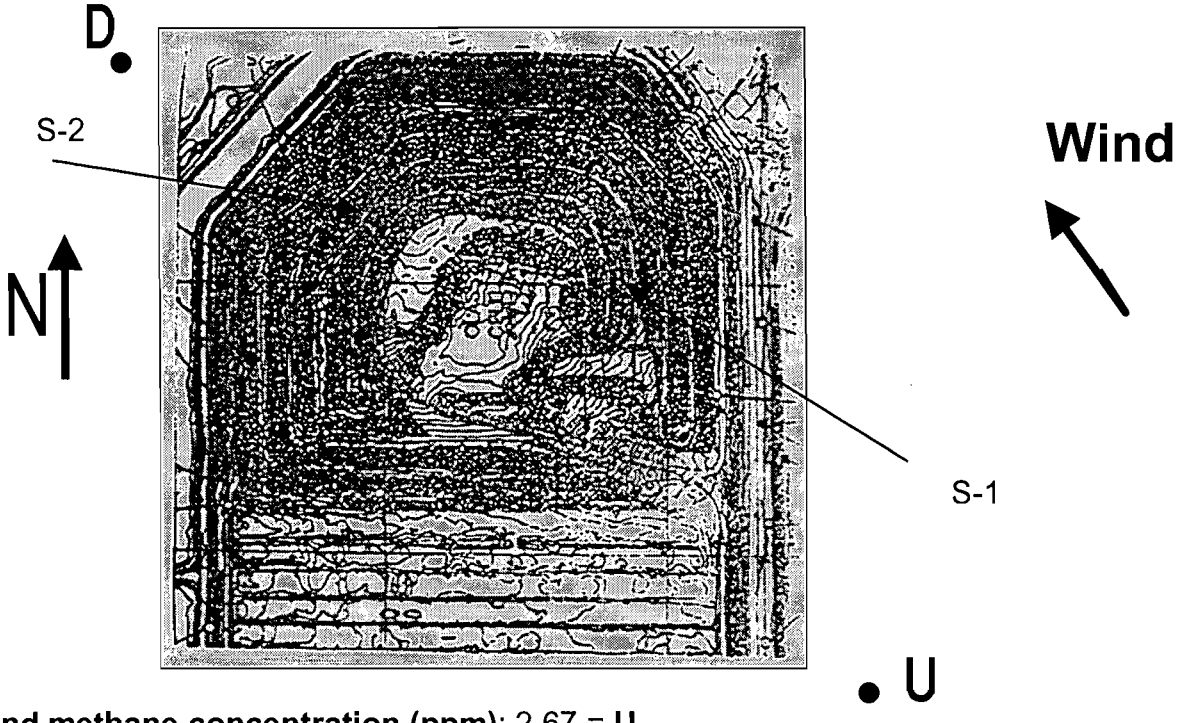
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 9/23/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 2.67 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 8.64 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 5.65 = Background Methane Concentration

Description of meteorological conditions: 85° F, BP 29.97 Hg, winds from the SE at 10 mph.

Surface Methane Concentration Data Form

Date: 9/23/2004

Weather Conditions: 85° F, BP 29.97 Hg, winds from the SE at 10 mph.
Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 9/23/2004

Background methane concentration (ppm) = 5.65 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial Reading 9/23/2004 (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S1	Y	1216.00	ND	1210.35
S2	Y	944.00	ND	938.35

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S1 location: E slope, 3rd tier, unlabeled 4"pipe. S2 location: 4th tier, NW corner, V-153.

Calibration Precision Data and Calculation Form

Date: 9/24/2004 (10 Day Recheck) **Cell 7B/8 (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 9/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1.11	508.00	506.89	-1.11
2	1.14	510.00	508.86	0.86
3	1.17	508.00	506.83	-1.17

Average = $\sum(D - A) \div 3$ = -0.47 = **E**

Calibration Precision = E ÷ A x 100= -0.09%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 9/24/2004 (10 Day Recheck)

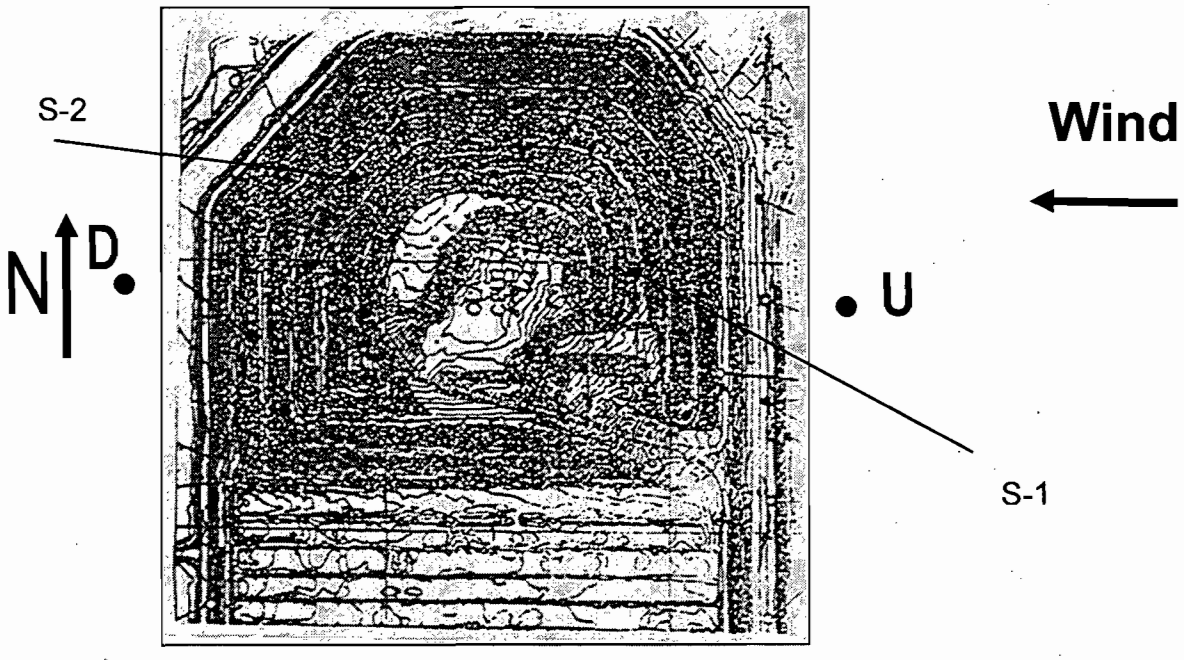
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 9/24/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.80 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.84 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.82 = Background Methane Concentration

Description of meteorological conditions: 87° F, BP 29.94 Hg, winds from the E at 10 mph.

Surface Methane Concentration Data Form

Date: 9/24/2004 (10 Day Recheck)

Weather Conditions: 87° F, BP 29.94 Hg, winds from the E at 10 mph.

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 9/24/2004

Background methane concentration (ppm) = 2.82 = **A**

Location Identification*	Synthetic Cover (Y/N)	10 Day Reading 9/24/2004 (B) (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S1	Y	6.70	ND	3.88
S2	Y	48.68	ND	45.86

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S1 location: E slope, 3rd tier, unlabeled 4"pipe. S2 location: 4th tier, NW corner, V-153.

Calibration Precision Data and Calculation Form

Date: 10/23/2004 (30 Day Recheck) **Cell 7B/8 (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 10/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.24	508.00	507.76	-0.24
2	0.30	510.00	509.70	1.07
3	0.32	509.00	508.68	0.68

Average = $\sum(D - A) \div 3$ = 0.50 = **E**

Calibration Precision = E ÷ A x 100= 0.99%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 10/23/2004 (30 Day Recheck)

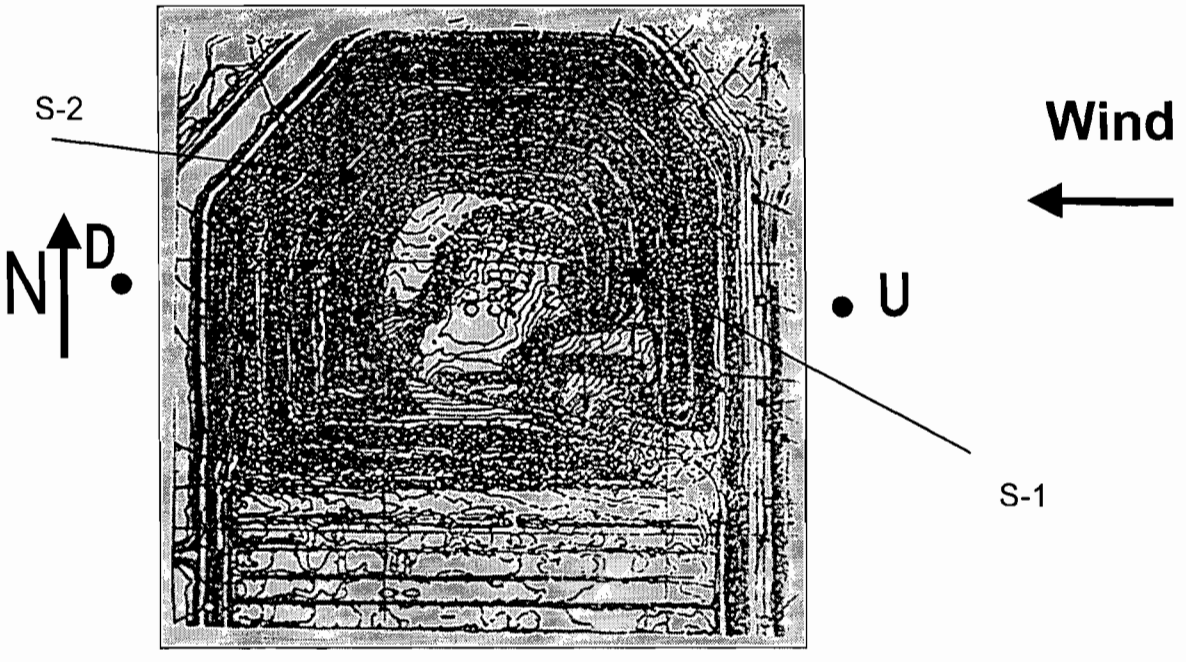
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 10/24/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 2.07 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.12 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.60 = Background Methane Concentration

Description of meteorological conditions: 82° F, BP 29.97 Hg, winds from the SE at 5 mph.

Surface Methane Concentration Data Form

Date: 10/23/2004 (30 Day Recheck)

Weather Conditions: 87° F, BP 29.94 Hg, winds from the E at 5 mph.

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 10/24/2004

Background methane concentration (ppm) = 2.60 = **A**

Location Identification*	Synthetic Cover (Y/N)	10 Day Reading 9/24/2004 (B) (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S1	Y	4.56	ND	1.96
S2	Y	32.10	ND	29.50

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S1 location: E slope, 3rd tier, unlabeled 4"pipe. S2 location: 4th tier, NW corner, V-153.

Calibration Precision Data and Calculation Form

Date: 9/24/2004 **Cell AK (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever.

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 9/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1.11	508.00	506.89	-1.11
2	1.14	510.00	508.86	0.86
3	1.17	508.00	506.83	-1.17

Average = $\Sigma(D - A) \div 3$= -0.47 = **E**

Calibration Precision = E ÷ A x 100= -0.09%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 9/24/2004

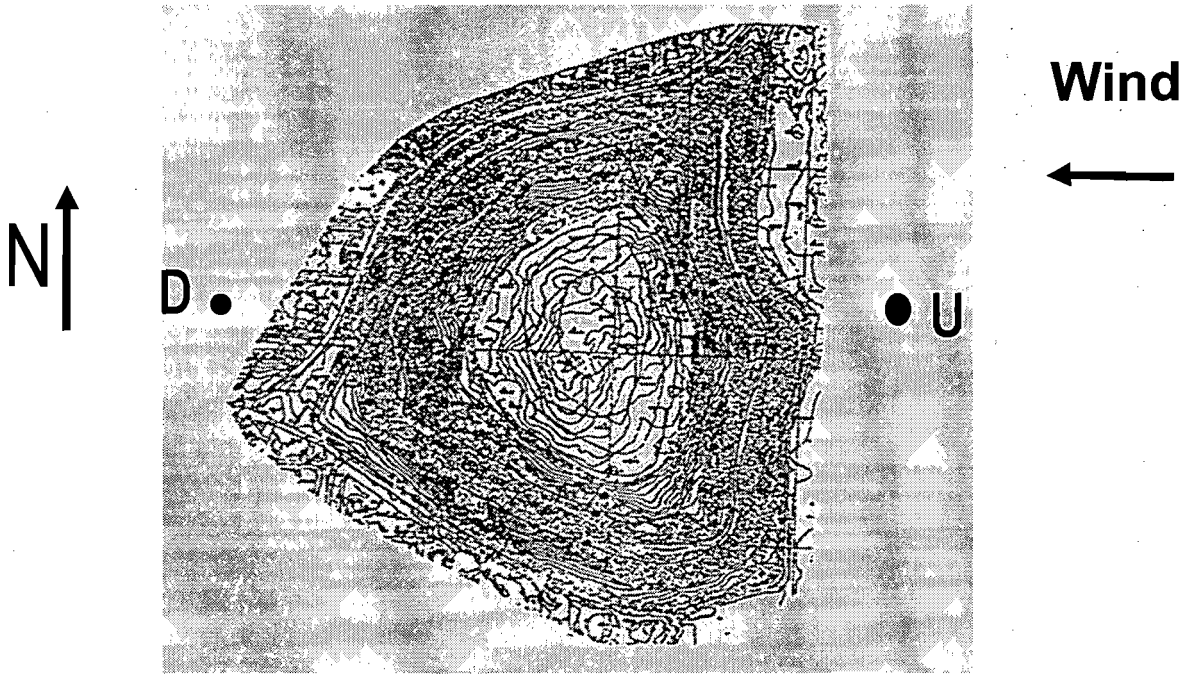
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 9/24/2005

Indicate wind direction on site diagram beneath:



Upwind methane concentration (ppm): 1.80 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.84= **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.82 = Background Methane Concentration

Description of meteorological conditions/notes: 87° F and BP 29.94 Hg, winds from the E at 10 mph.

Surface Methane Concentration Data Form

Date: 9/24/2004

Weather Conditions: 87° F and BP 29.94 Hg, winds from E at 10 mph.

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 9/24/2004

Background methane concentration (ppm) = 2.82 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = C-A (ppm Methane Concentration)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 9/24/2004 (Testing started and completed) **Inactive Class III (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 9/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1.11	508.00	506.89	-1.11
2	1.14	510.00	508.86	0.86
3	1.17	508.00	506.83	-1.17

Average = $\Sigma(D - A) \div 3$= -0.47= **E**

Calibration Precision = E ÷ A x 100= -0.09%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 9/24/2004

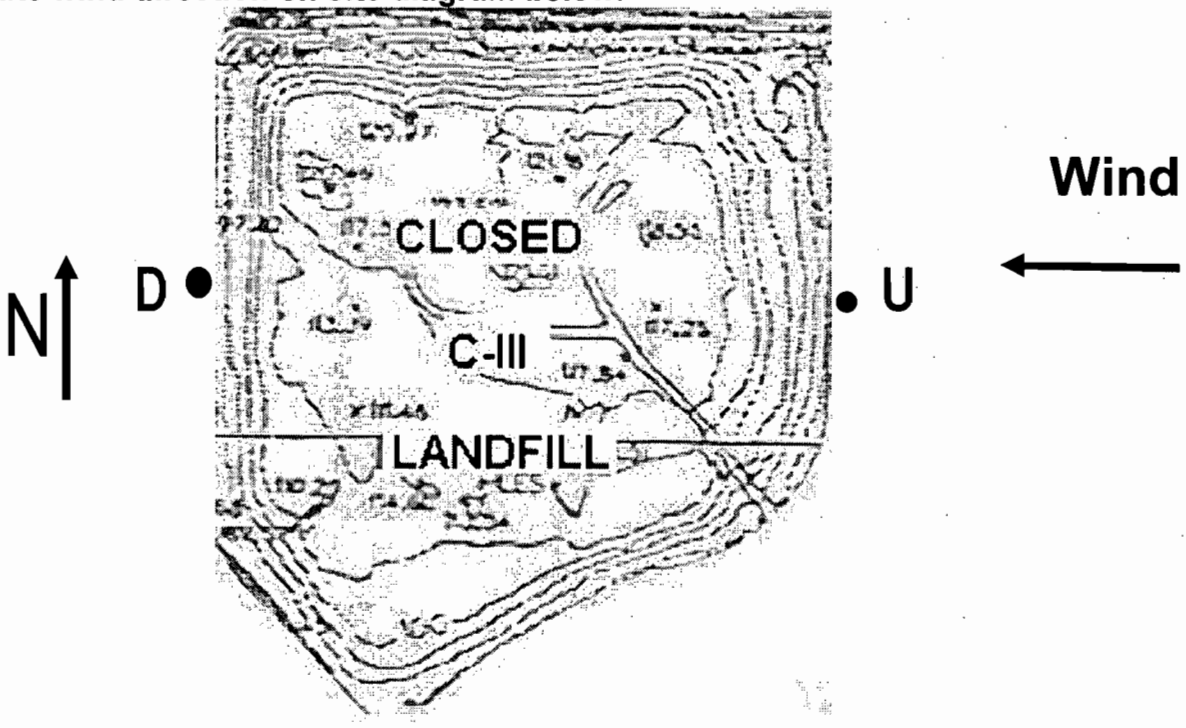
Instrument make/model: TVA 1000B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 9/24/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.80 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.84 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.82 = Background Methane Concentration

Description of meteorological conditions/notes: 87° F, BP 29.94 Hg, winds from the E at 10 mph.

Surface Methane Concentration Data Form

Date: 9/24/2004

Weather Conditions: 87° F, BP 29.94 Hg, winds from the E at 10 mph.

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 9/24/2004

Background methane concentration (ppm) = 2.82 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 9/23/2004 **Cell Pre 85 (3rd Q)**

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508.00 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 9/23/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.87	510.00	509.13	1.13
2	1.06	511.00	509.94	1.94
3	0.98	509.00	508.02	0.02

Average = $\Sigma(D - A) \div 3$ = 1.03 = **E**

Calibration Precision = E ÷ A x 100 = 0.20%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 9/23/2004

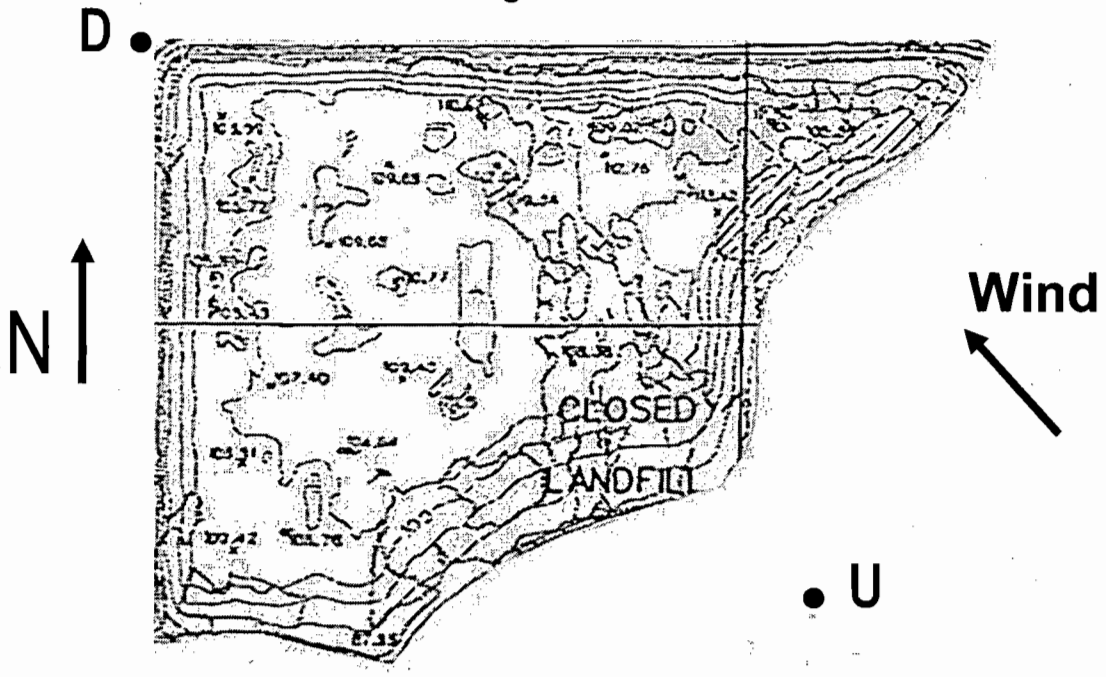
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 9/23/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 2.67 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 8.64 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2 = 5.65 = Background Methane Concentration

Description of meteorological conditions/notes: 85° F, BP 29.97 Hg, winds from the SE at 10 mph.

Surface Methane Concentration Data Form

Date: 9/23/2004

Weather Conditions: 85° F, BP 29.97 Hg, winds from the SE at 10 mph.

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 9/23/2004

Background methane concentration (ppm) = 5.65 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road ▪ Orlando, Florida 32829
407-836-6600 ▪ Fax 407-836-6629

Tom File (Original)
TJM 10-5-04

RECEIVED
OCT 04 2004
Central Dist. - DEP

September 29, 2004

Mr. Tom Mulligan
Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

RE: Orange County Landfill Second Quarter 2004 Surface Emissions Monitoring (SEM) Report (Permit No. 0950113-001-AV)

Dear Mr. Mulligan:

Please find attached two copies of the above referenced report. The SEM field monitoring and written report were completed by SCS Field Services, Inc.

If you have any questions or comments, please call Dan Morrical, P.E. at 407-836-6654 or Michael Rogers, P.G. at 407-836-6680.

Sincerely,

James W. Becker
Manager

JB/mr

Attachments: Quarterly Surface Methane Emissions Monitoring Reports for Orange County Landfill

c: Caroline Shine, Environmental Manager, Air Enforcement/ Monitoring, FDEP [Orlando]
Teresa Remudo-Fries, P.E., Deputy Director, Orange County Utilities Department
Anthony J. Cotter, Assistant County Attorney, Orange County Attorney's Office
Dan Morrical, P.E., Chief Engineer, Orange County Utilities-Solid Waste Division
Mike Rogers, Environmental Specialist, Orange County Utilities-Solid Waste Division
James W. Flynt, Jr., P.E., Sr. Engineer, Orange County Utilities-Solid Waste Division
Stanley J. Keely, P.E., WCG Inc. [Maitland, FL]
David H. Penoyer, P.E., SCS Engineers [Tampa, FL]
John Sullivan, SCS Field Services [Tampa, FL]

Environmental Consultants

3012 U.S. Highway 301 N
Suite 700
Tampa, FL 33619-2242

813 630-2109
FAX 813 630-1790
www.scsengineers.com

SCS FIELD SERVICES

File Copy

September 9, 2004
File No. 07203090.02

Mr. James Flynt, P.E.
Orange County Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Subject: Surface Emission Monitoring (SEM) Second Quarter 2004
Orange County Solid Waste Management Facility, Orange County, Florida
Permit No. 0950113-001-AV

Dear Jim:

On June 17, 18, 23, 24, and July 16, 2004, SCS Field Services (SCS-FS) conducted the Second Quarter SEM and required re-checks of exceedance areas at the subject landfill, as specified in facility's Title V permit, and the requirements of 40 CFR 60.755 (c) and (d), and 40 CFR 60, Appendix A, Method 21.

A total of 1,803 points were tested for emissions of volatile organic compounds (VOC), as methane, using a Foxboro TVA-1000B flame ionization detector. The calibration and Precision Data and Calculation Forms, Background Methane Concentration Data and Calculation Forms, and the Surface Methane Concentration Data Forms are attached.

Over the area surveyed, there were two exceedances on the Pre-1985 landfill, two exceedances on Cell 7B, and no exceedances on Cells A-K and the Class III landfill. The two exceedance areas on the Pre-1985 landfill (S-1 and S-2) and one exceedance area on Cell 7B (S-4) were remediated by placing additional cover material over top of the exceedance areas. The other exceedance area on Cell 7B (S-3) was remediated by repairing the well boot at EW-51.

The 10-day and the 30-day re-checkes of the exceedance areas were below 500 ppm VOC. Per the regulations, no further rechecks are required.

SCS Field Services appreciates the opportunity to provide this service. Call us if you have any questions or need additional information.

Sincerely,

David Penoyer, P.E.
Project Manager
SCS ENGINEERS

John R. Sullivan
Project Manager
SCS FIELD SERVICES

Attachments

Inactive Class III
Calibration Precision Data and Calculation Form
Second Quarter 2004

Date: 6/24/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.15	508	507.85	-0.15
2	0.22	508	507.78	-0.22
3	0.08	509	508.92	0.92

Average = $\sum(D - A) \div 3$= 0.18= **E**

Calibration Precision = E ÷ A x 100= 0.04%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Inactive Class III
Background Methane Concentration Data and Calculation Form
Second Quarter 2004

Date: 6/24/2004

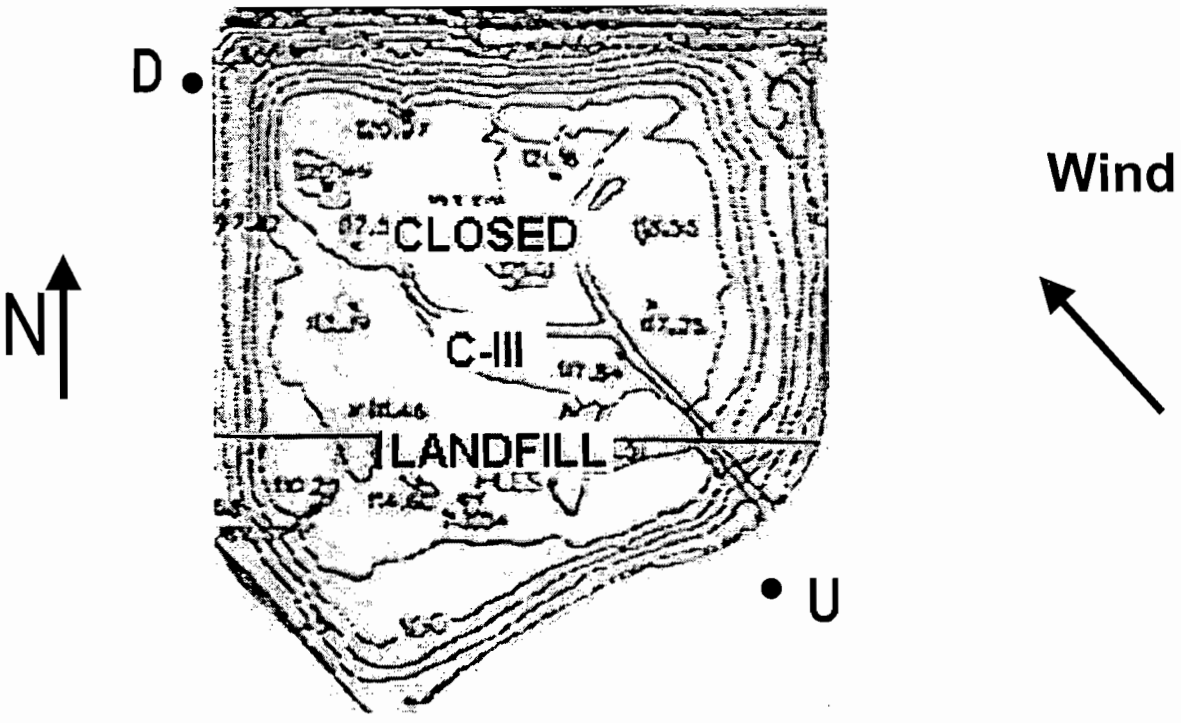
Instrument make/model: TVA 1000B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 6/24/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 0.76 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 1.24 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 1.0 = Background Methane Concentration

Description of meteorological conditions/notes: 85° F, BP 29.88 Hg, winds from SE at 1 mph, clear.

Inactive Class III
Surface Methane Concentration Data Form
Second Quarter 2004

Date: 6/24/2004

Weather Conditions: 85° F, BP 29.88 Hg, winds from SE at 1 mph, clear..

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 6/24/2004

Background methane concentration (ppm) = 1.0 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Cell Pre 85
Calibration Precision Data and Calculation Form
Second Quarter 2004

Date: 6/17/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Scott Lambert

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/17/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	-0.13	506	506.13	-1.87
2	-0.18	507	507.18	-0.82
3	-0.21	508	508.21	0.21

Average = $\sum(D - A) \div 3$= -0.83 = **E**

Calibration Precision = E ÷ A x 100= -0.16%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell Pre 85
Background Methane Concentration Data and Calculation Form
Second Quarter 2004

Date: 6/17/2004

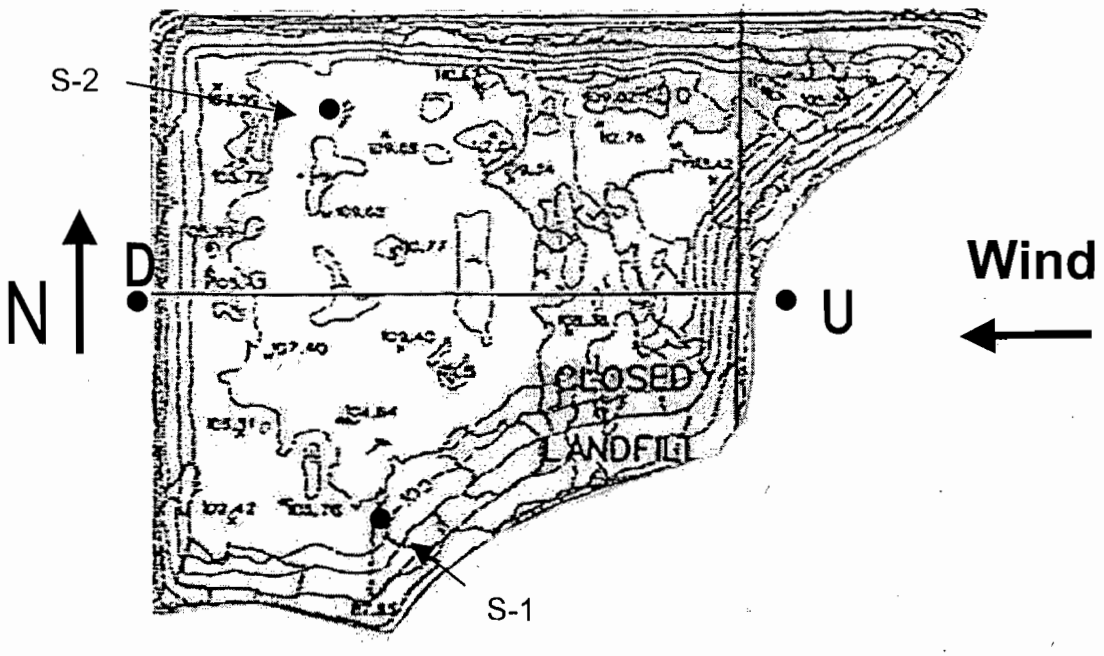
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Scott Lambert

Date of instrument calibration: 6/17/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.73 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 1.69 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 1.71 = Background Methane Concentration

Description of meteorological conditions/notes: 90° F, BP 29.53 Hg, winds from E 5 mph

Cell Pre 85
Surface Methane Concentration Data Form
Second Quarter 2004

Date: 6/17/2004

Weather Conditions: 90° F, BP 29.53 Hg, winds from E 5 mph

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Scott Lambert

Date of instrument calibration: 6/17/2004

Background methane concentration (ppm) = 1.71 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S-1	N	3247	ND	3245.29
S-2	N	7179	ND	7177.29

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:

Cell Pre 85
Calibration Precision Data and Calculation Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Scott Lambert

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/18/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.04	507	506.96	-1.04
2	0.02	508	507.98	-0.02
3	-0.01	507	507.01	-0.99

Average = $\sum(D - A) \div 3$= -0.68 = **E**

Calibration Precision = E ÷ A x 100= -0.13%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell Pre 85
Background Methane Concentration Data and Calculation Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

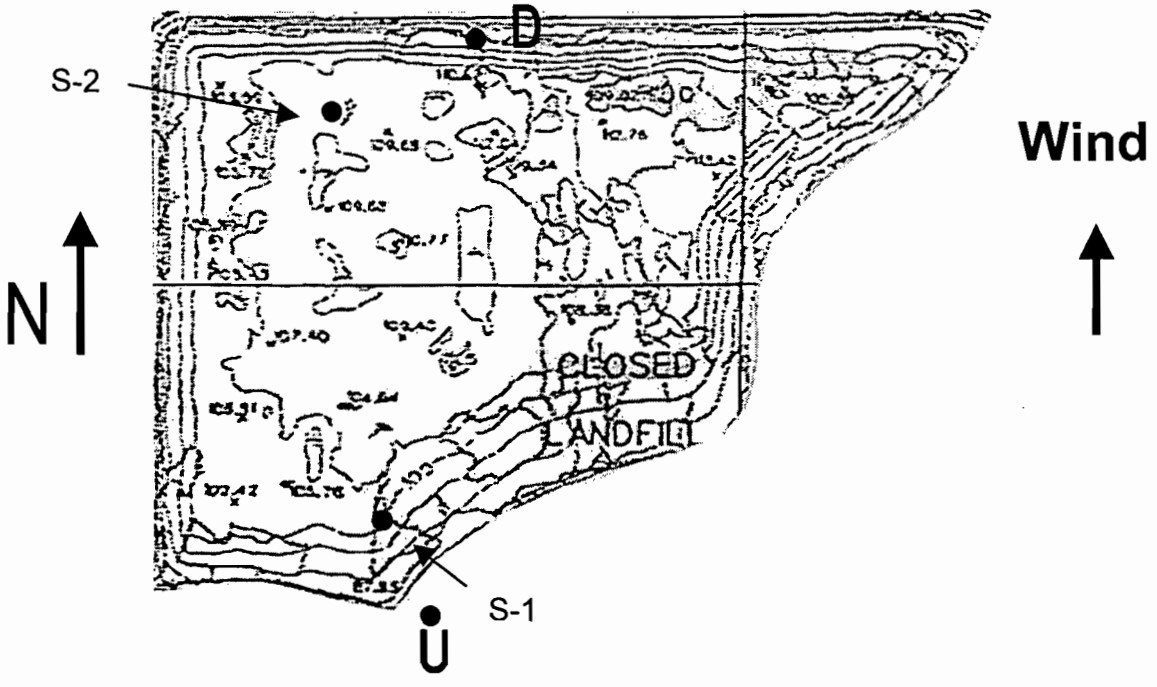
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Scott Lambert

Date of instrument calibration: 6/18/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.21 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 2.04 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 1.63 = Background Methane Concentration

Description of meteorological conditions/notes: 90° F, BP 29.91 Hg, winds from S 10 to 20 mph

Cell Pre 85
Surface Methane Concentration Data Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

Weather Conditions: 90° F, BP 29.91 Hg, winds from S 10 to 20 mph

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Scott Lambert

Date of instrument calibration: 6/18/2004

Background methane concentration (ppm) = 1.63 = **A**

Location Identification*	Synthetic Cover (Y/N)	10 Day Recheck 6/18/2004 Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S-1	N	7.64	ND	6.01
S-2	N	5.43	ND	3.80

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:_____

Cell Pre 85
Calibration Precision Data and Calculation Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: John Sullivan

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration:7/16/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C). (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.94	500	499.06	-8.94
2	0.94	507	506.06	-1.94
3	0.19	509	508.81	0.81

Average = $\sum(D - A) \div 3$= -3.36 = **E**

Calibration Precision = E ÷ A x 100= -0.66%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cells Pre 85
Background Methane Concentration Data and Calculation Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/2004

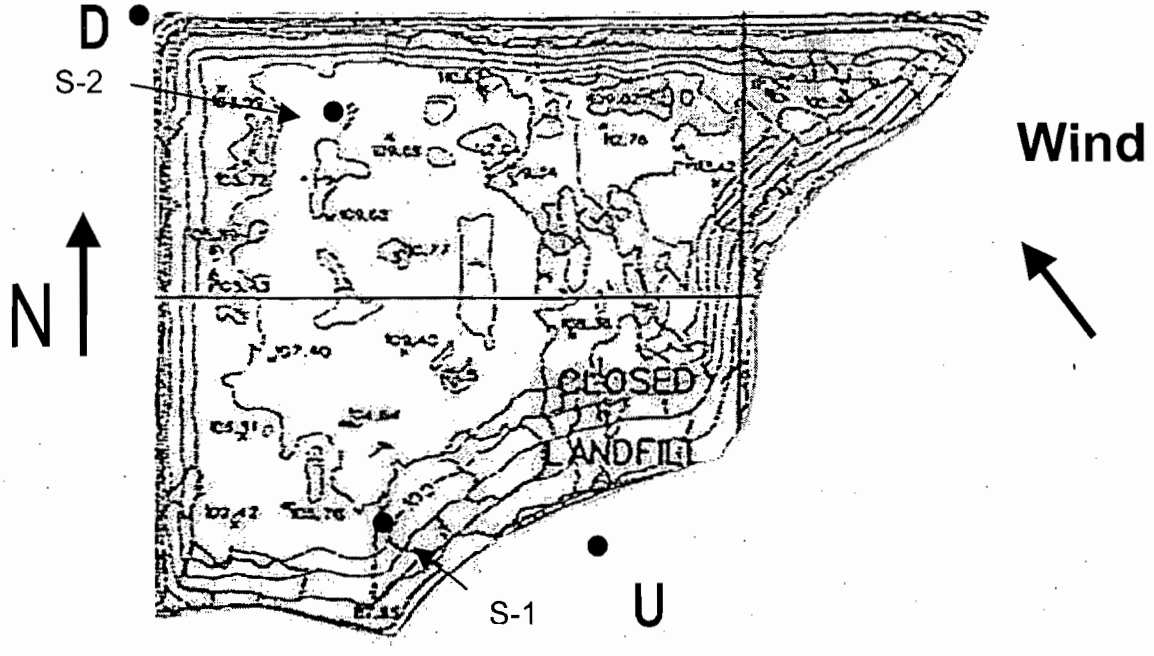
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: John Sullivan

Date of instrument calibration: 7/16/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.02 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.42 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.22 = Background Methane Concentration

Description of meteorological conditions/notes: 87° F, BP 30.01 Hg, winds from SE 3 to 5 mph

Cell Pre 85
Surface Methane Concentration Data Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/2004

Weather Conditions: 87° F, BP 30.01 Hg, winds from SE 3 to 5 mph

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: John Sullivan

Date of instrument calibration: 7/16/2004

Background methane concentration (ppm) = 2.22 = **A**

Location Identification*	Synthetic Cover (Y/N)	30 Day Recheck 7/16/2004 Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S-1	N	24.06	ND	21.84
S-2	N	2.21	ND	-0.01

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:

Cell 7B
Calibration Precision Data and Calculation Form
Second Quarter 2004

Date: 6/18/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Scott Lambert

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/18/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.04	507	506.96	-1.04
2	0.02	508	507.98	-0.02
3	-0.01	507	507.01	-0.99

Average = $\sum(D - A) \div 3$ = -0.68 = **E**

Calibration Precision = E ÷ A x 100= -0.13%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell 7B
Background Methane Concentration Data and Calculation Form
Second Quarter 2004

Date: 6/18/2004

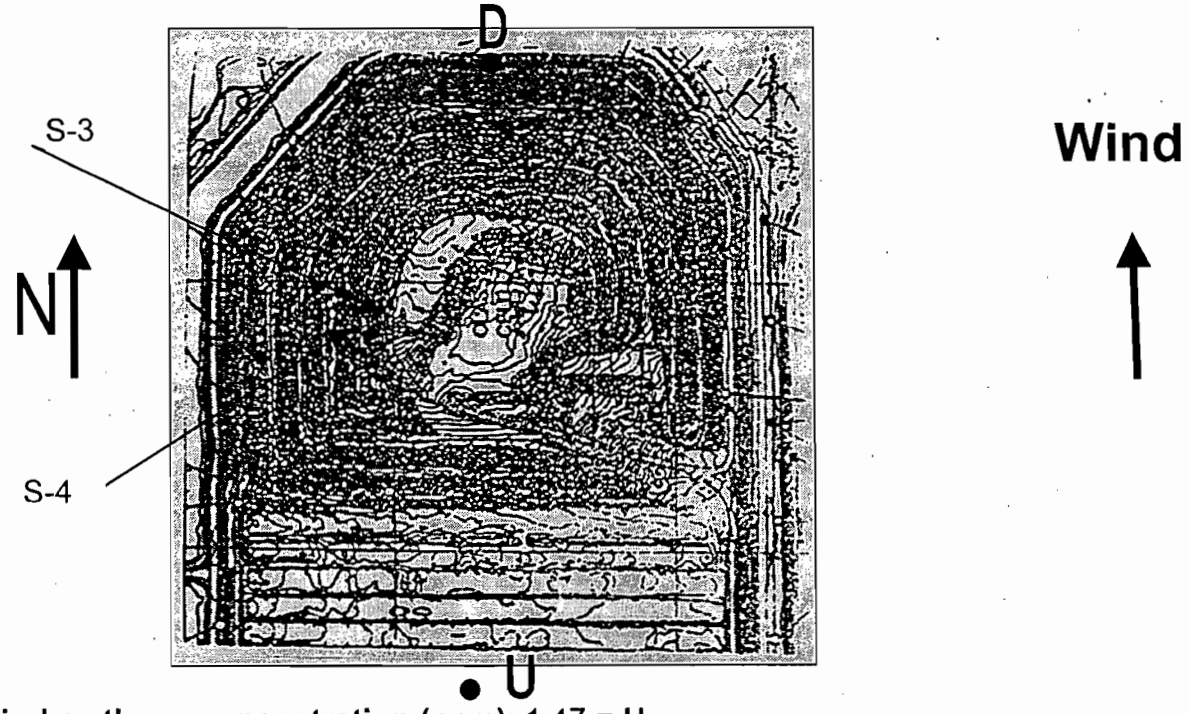
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Scott Lambert

Date of instrument calibration: 6/18/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.47 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 55.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 28.5 = Background Methane Concentration

Description of meteorological conditions: 90° F, BP 29.91 Hg, winds10 to 20 mph from S

Cell 7B
Surface Methane Concentration Data Form
Second Quarter 2004

Date: 6/18/2004

Weather Conditions: 90° F, BP 29.91 Hg, winds10 to 20 mph from S

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Scott Lambert

Date of instrument calibration: 6/18/2004

Background methane concentration (ppm) = 28.5 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial Reading 6/18/2004 (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S3	Y	1549	ND	1520.5
S4	Y	3411	ND	3382.5

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S3 location at EW-51, base of well. S4 location100 ft W of EW-51.

Cell 7B
Calibration Precision Data and Calculation Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Scott Lambert

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/18/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.04	507	506.96	-1.04
2	0.02	508	507.98	-0.02
3	-0.01	507	507.01	-0.99

Average = $\sum(D - A) \div 3$ = -0.68 = **E**

Calibration Precision = E ÷ A x 100= -0.13%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell 7B
Background Methane Concentration Data and Calculation Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

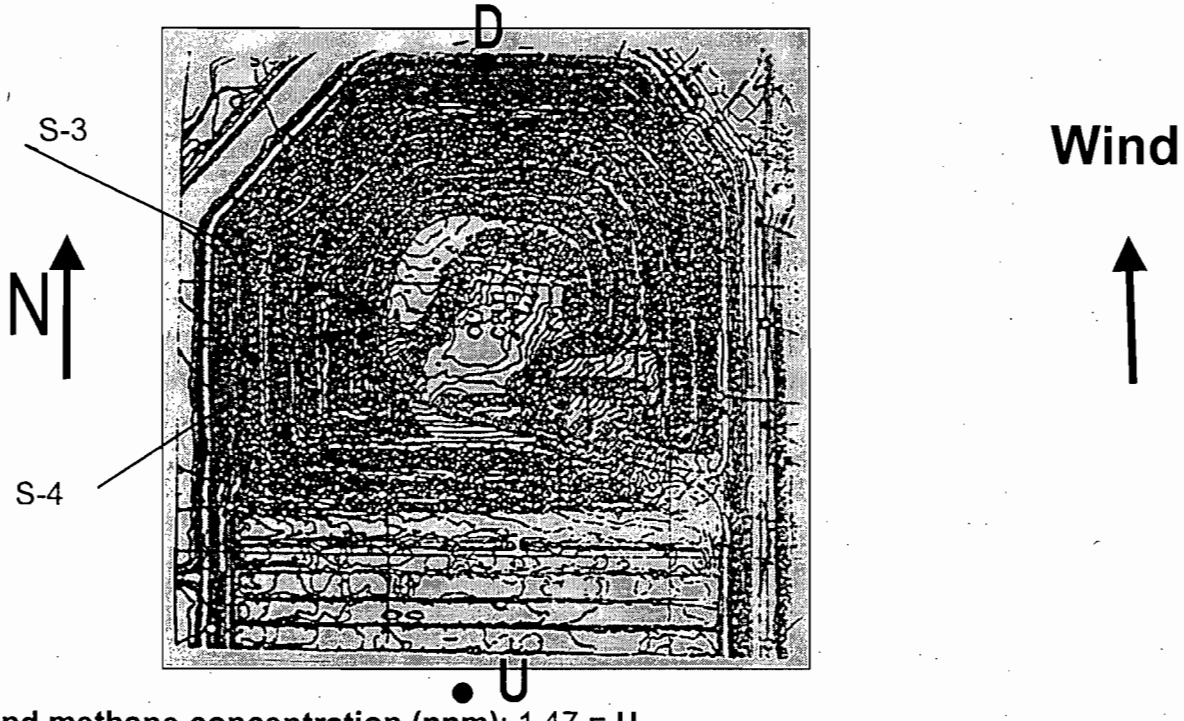
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Scott Lambert

Date of instrument calibration: 6/18/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.47 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 55.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 28.5 = Background Methane Concentration

Description of meteorological conditions: 90° F, BP 29.91 Hg, winds10 to 20 mph from S

Cell 7B
Surface Methane Concentration Data Form
10-Day Recheck, Second Quarter 2004

Date: 6/18/2004

Weather Conditions: 90° F, BP 29.91 Hg, winds10 to 20 mph from S

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: Scott Lambert

Date of instrument calibration: 6/18/2004

Background methane concentration (ppm) = 28.5 = **A**

Location Identification*	Synthetic Cover (Y/N)	10 Day Reading 6/18/2004 (B) (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S3	Y	4.26	ND	-24.24
S4	Y	15.80	ND	-12.70

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S3 location at EW-51, base of well. S4 location100 ft W of EW-51.

Cell 7B
Calibration Precision Data and Calculation Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/ 2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: John Sullivan

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 = **A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 7/16/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.94	500	499.06	-8.94
2	0.94	507	506.06	-1.94
3	0.19	509	508.81	0.81

Average = $\sum(D - A) \div 3$ = -3.36 = **E**

Calibration Precision = E ÷ A x 100= -0.66%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell 7B
Background Methane Concentration Data and Calculation Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/2004

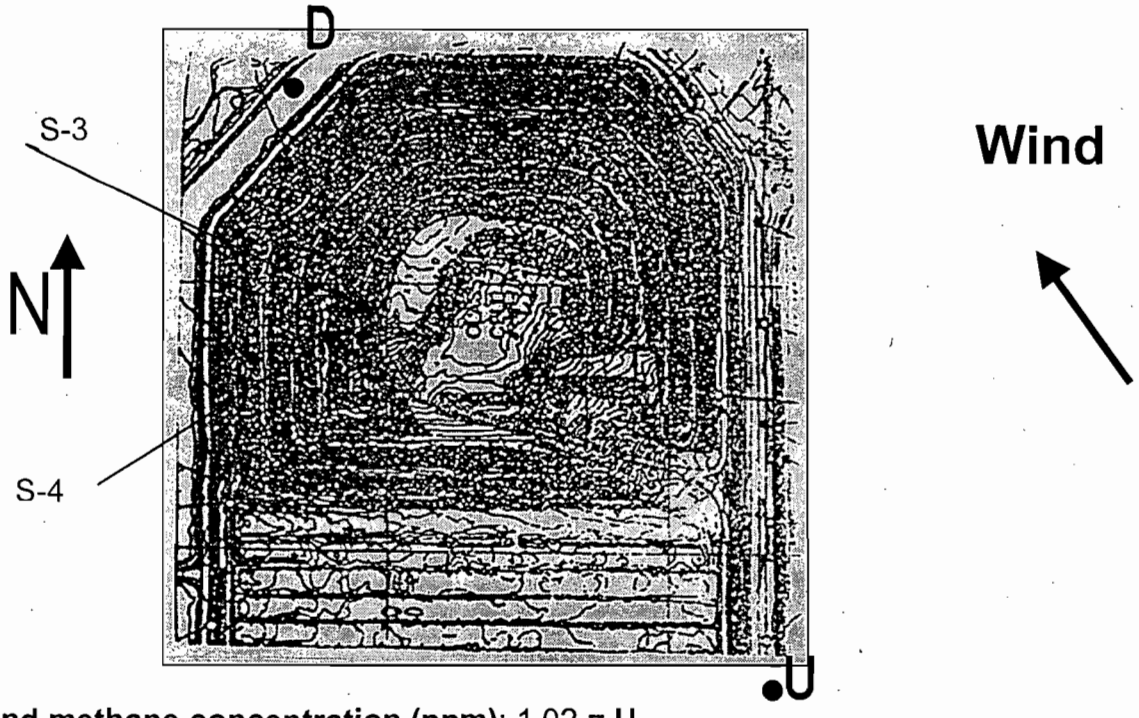
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: John Sullivan

Date of instrument calibration: 7/16/2004

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.02 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.42 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.22 = Background Methane Concentration

Description of meteorological conditions: 87° F, BP 30.01 Hg, winds 3 to 5 mph from SE

Cell 7B
Surface Methane Concentration Data Form
30-Day Recheck, Second Quarter 2004

Date: 7/16/2004

Weather Conditions: 87° F, BP 30.01 Hg, winds 3 to 5 mph from SE

Instrument make/model: TVA 1000 B

Name of person performing surface methane monitoring: John Sullivan

Date of instrument calibration: 7/16/2004

Background methane concentration (ppm) = 2.22 = **A**

Location Identification*	Synthetic Cover (Y/N)	30 Day Reading 7/16/2004 (B) (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = B-A (ppm Methane)
S3	Y	4.76	ND	2.54
S4	Y	5.04	ND	2.82

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: S3 location at EW-51, base of well. S4 location100 ft W of EW-51.

Cell AK
Calibration Precision Data and Calculation Form
Second Quarter 2004

Date: 6/23/2004

Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of person performing calibration precision test: Jason Bever.

Zero gas expiration date: 5/13/2005

Calibration gas concentration (ppm): 508 **= A**

Calibration gas expiration date: 5/13/2005

Date of instrument calibration: 6/23/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0.09	508	507.91	-0.09
2	0.12	507	506.88	-1.12
3	0.10	509	508.90	0.90

Average = $\sum(D - A) \div 3$= -0.10 = **E**

Calibration Precision = E ÷ A x 100= -0.02%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Cell AK
Background Methane Concentration Data and Calculation Form
Second Quarter 2004

Date: 6/23/2004

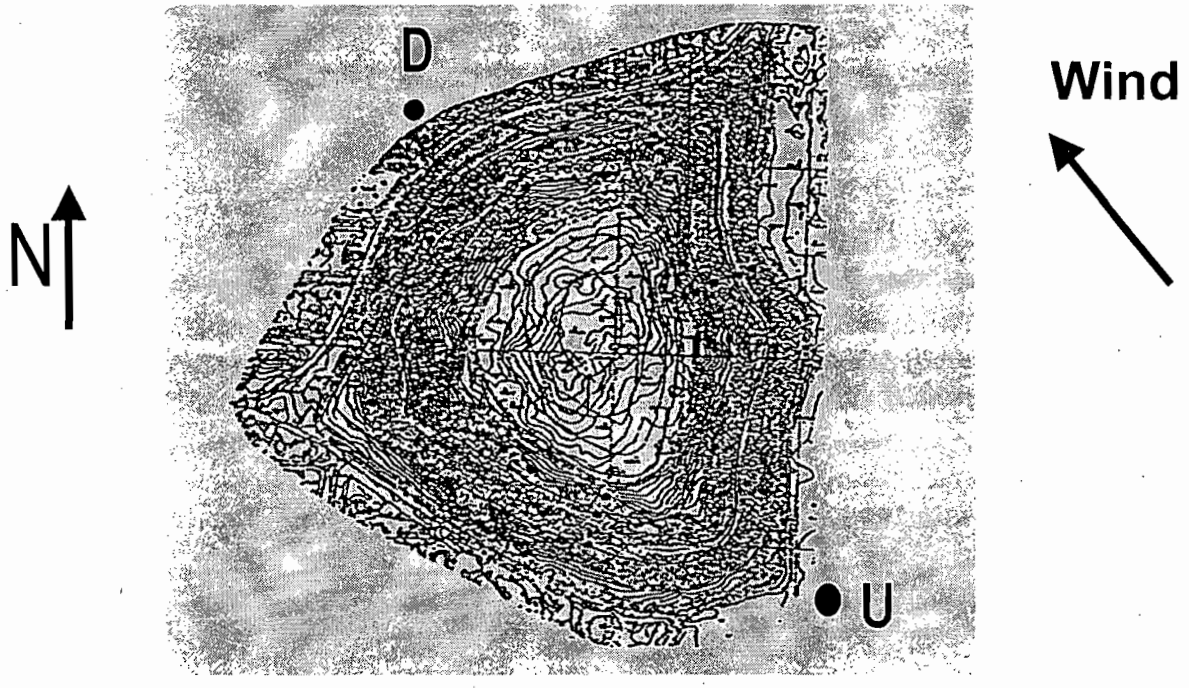
Instrument make/model: TVA 1000 B

Instrument serial number: 126916188

Name of Person performing background concentration test: Jason Bever

Date of instrument calibration: 6/23/2005

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 1.78 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 2.94= **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 2.36 = Background Methane Concentration

Description of meteorological conditions/notes: 88° F and BP 29.94 Hg, winds from SE at 2 mph.

Cell AK
Surface Methane Concentration Data Form
Second Quarter 2004

Date: 6/23/2004

Weather Conditions: 88° F and BP 29.94 Hg, winds from SE at 2 mph.

Instrument make/model: TVA 1000 B
Name of person performing surface methane monitoring: Jason Bever

Date of instrument calibration: 6/23/2004

Background methane concentration (ppm) = 2.36 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Above Background = C-A (ppm Methane Concentration)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road • Orlando, Florida 32829
407-836-6600 • Fax 407-836-6629

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APR 20 2004
Central Dist. - DEP

April 20, 2004

Ms. Caroline Shine
Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

RE: Orange County Landfill Fourth Quarter 2003 and First Quarter 2004 Surface Emissions Monitoring Report (Permit No. 0950113-001-AV)

Dear Ms. Shine:

Please find attached two copies of the above referenced reports.

Initial results of the fourth quarter 2003 monitoring indicated that we had 4 (four) exceedances on Cell 7B and no exceedances of 500 ppm or greater on Cells A-K, Pre 85, and Inactive Class III. Subsequent 10 and 30-day follow-up testing of the four areas with reported exceedances on Cell 7B showed only 2 (two) exceedances. Dirt was placed around these areas and our liner repair contractor, Landsaver, Inc., was notified and arrived on January 5, 2004 to make permanent repairs. SEM reports for these sampling events were previously submitted per the request of Ms. Sofia Kazi via letter dated January 23, 2004. These two areas were remediated and post remediation follow-up testing was completed. The attached reports include those submitted with the January 23 letter as well as the recent post remediation follow-up testing.

Initial results of the first quarter 2004 monitoring indicated that we had 2 (two) exceedances in the Pre-1985 cell and no exceedances of 500 ppm or greater on Cells A-K, 7B, or Inactive Class III. The two (2) exceedance areas on Pre-1985 were remediated by placing additional cover. 10-Day and 30-Day follow-up testing of these areas showed no exceedances.

If you have any questions or comments, please call Dan Morrical, P.E. at 407-836-6654 or Michael Rogers, P.G. at 836-6680.

Sincerely,

James W. Becker, Manager
Solid Waste Division

JB/mr

Attachments: Quarterly Surface Methane Emissions Monitoring Reports for Orange County Landfill

cc: Teresa Remudo-Fries, Orange County
Anthony Cotter, Orange County
Stan Keely, WCG
Mike Rogers, Orange County
Jim Flynt, Orange County

FOURTH QUARTER 2003

Calibration Precision Data and Calculation Form

Date: 12/11/2003 (Initial Test) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 12/11/2003

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	-.1	495	495	5
2	1.1	494	493	7
3	.1	494	494	6

Average = $\sum(D - A) \div 3$ = 6.0 = **E**

Calibration Precision = E ÷ A x 100= 1.2%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 12/11/2003

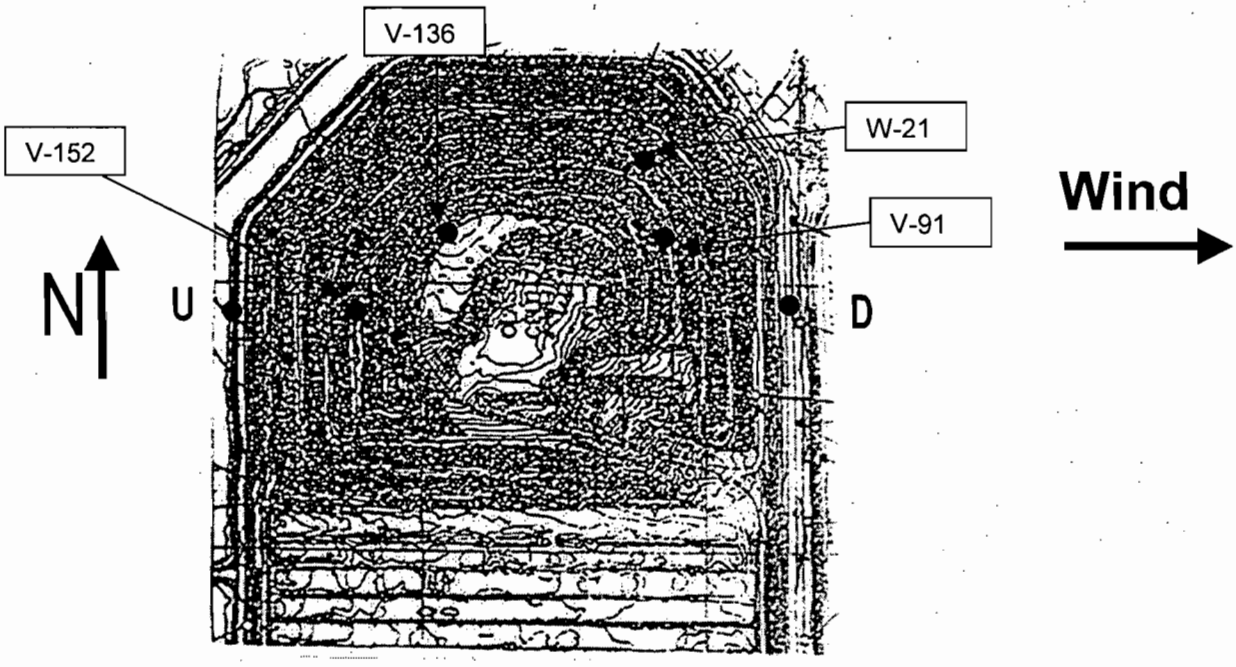
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **12/11/2003**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.5 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 6.9 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.7 = Background Methane Concentration

Meteorological conditions: 63° F, 48% RH, Winds 12 MPH from the West, clear.

Surface Methane Concentration Data Form

Date: 12/11/2003

Weather Conditions: 63° F, 48% RH, Winds 12 MPH from the West, clear.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 12/11/2003

Background methane concentration (ppm) = 6.7 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	1500	1500	1493
V-136	Y	1783	1783	1476
W-21	Y	801	801	794
V-152	Y	>49,999	>49,999	>49,999

Notes: _____

Calibration Precision Data and Calculation Form

Date: 12/22/03 (10 Day Retest) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Michael Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 12/22/03

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	-0.3	495	495	5
2	-2.5	494	494	6
3	.1	493	493	7

Average = $\sum(D - A) \div 3$ = 6.0 = **E**

Calibration Precision = E ÷ A x 100= 1.2%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 12/22/03

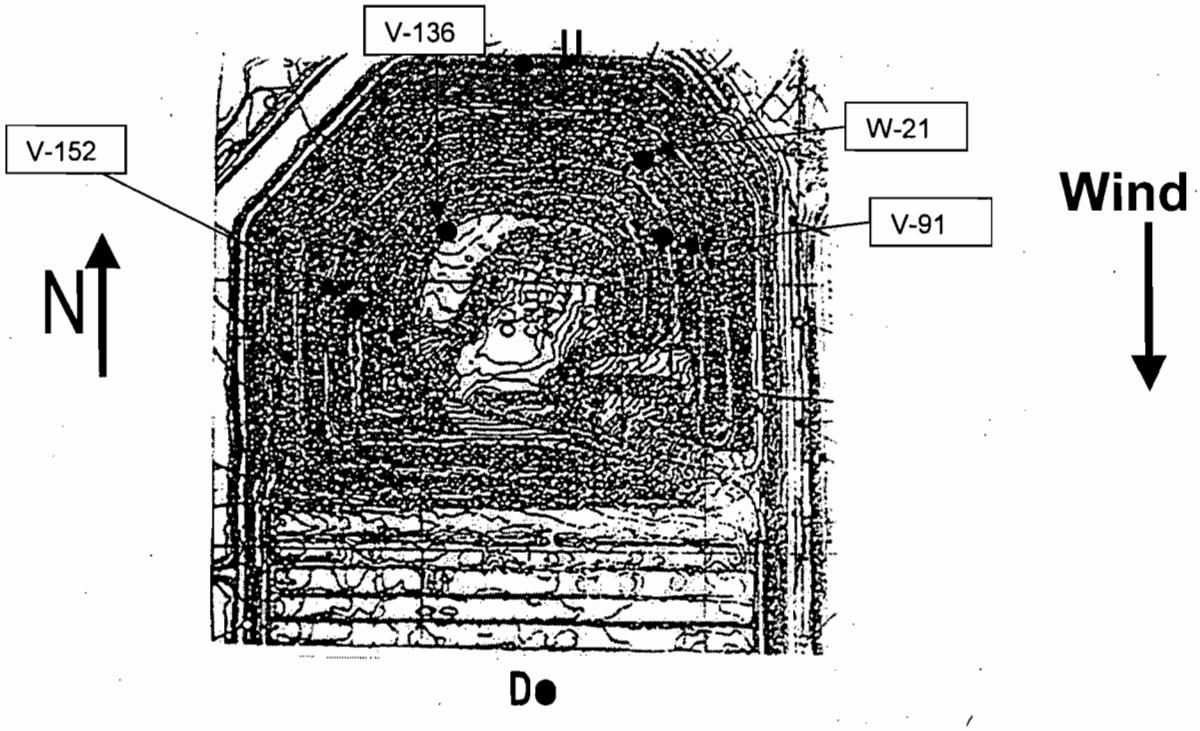
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Michael Stewart

Date of instrument calibration: **12/22/03**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.8 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 7.0 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.9 = Background Methane Concentration

Meteorological conditions: 54° F, 68% RH, Winds 10 MPH from the North.

Surface Methane Concentration Data Form

Date: 12/22/03

Weather Conditions: 54° F, 68% RH, Winds 10 MPH from the North.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Michael Stewart

Date of instrument calibration: 12/22/03

Background methane concentration (ppm) = 6.9 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	2925	2925	2918
V-136	Y	No Exceedance		
W-21	Y	No Exceedance		
V-152	Y	6177	6177	6170

Notes:

Calibration Precision Data and Calculation Form

Date: 1/2/2004 (20 Day) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Michael Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 1/2/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	-.5	494	494	6
2	0	493	493	7
3	0	493	493	7

Average = $\sum(D - A) \div 3$ = 7.0 = **E**

Calibration Precision = E ÷ A x 100= 1.4%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 1/2/2004

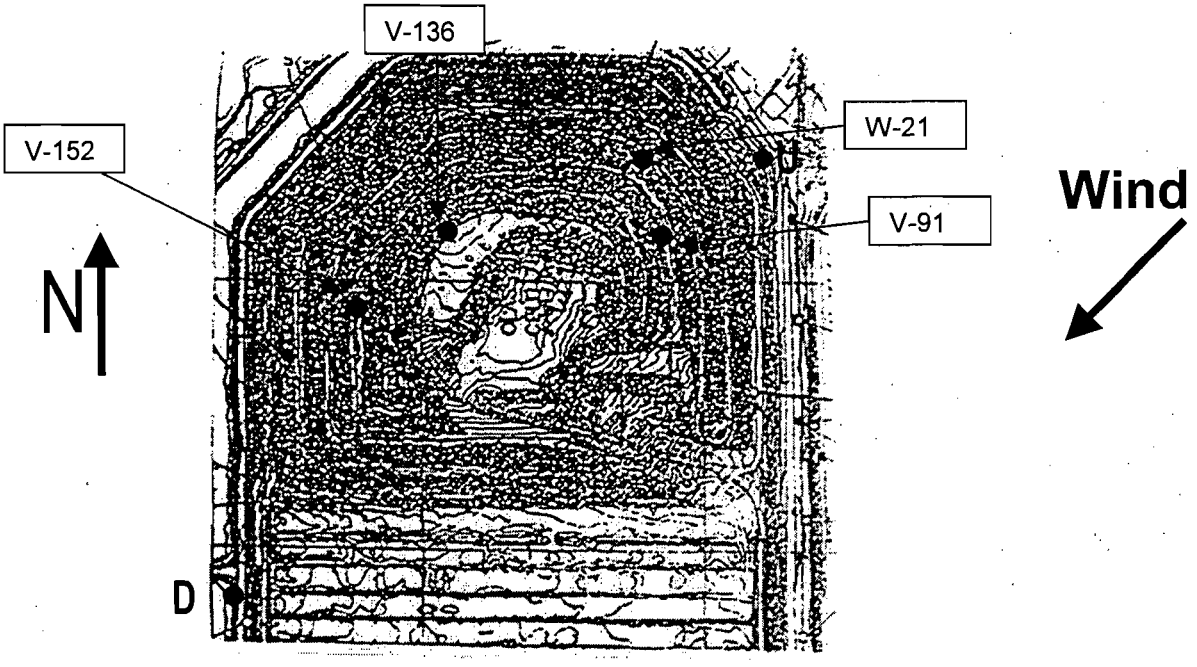
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Michael Stewart

Date of instrument calibration: **1/2/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.3 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 4.1 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 5.2 = Background Methane Concentration

Meteorological conditions: 65° F, 84% RH, Winds 5 MPH from the Northeast, Clear.

Surface Methane Concentration Data Form

Date: 1/2/2004

Weather Conditions: 65° F, 84% RH, Winds 5 MPH from the Northeast, Clear.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Michael Stewart

Date of instrument calibration: 1/2/2004

Background methane concentration (ppm) = 5.2 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	3309	3309	3304
V-136	Y	No Exceedance		
W-21	Y	No Exceedance		
V-152	Y	940	940	935

Notes: _____

Calibration Precision Data and Calculation Form

Date: 1/12/2004 (30 Day) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 1/12/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.2	493	493	7
2	.1	494	494	6
3	.1	494	494	6

Average = $\sum(D - A) \div 3$ = 6.0 = **E**

Calibration Precision = E ÷ A x 100= 1.2%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 1/12/2004

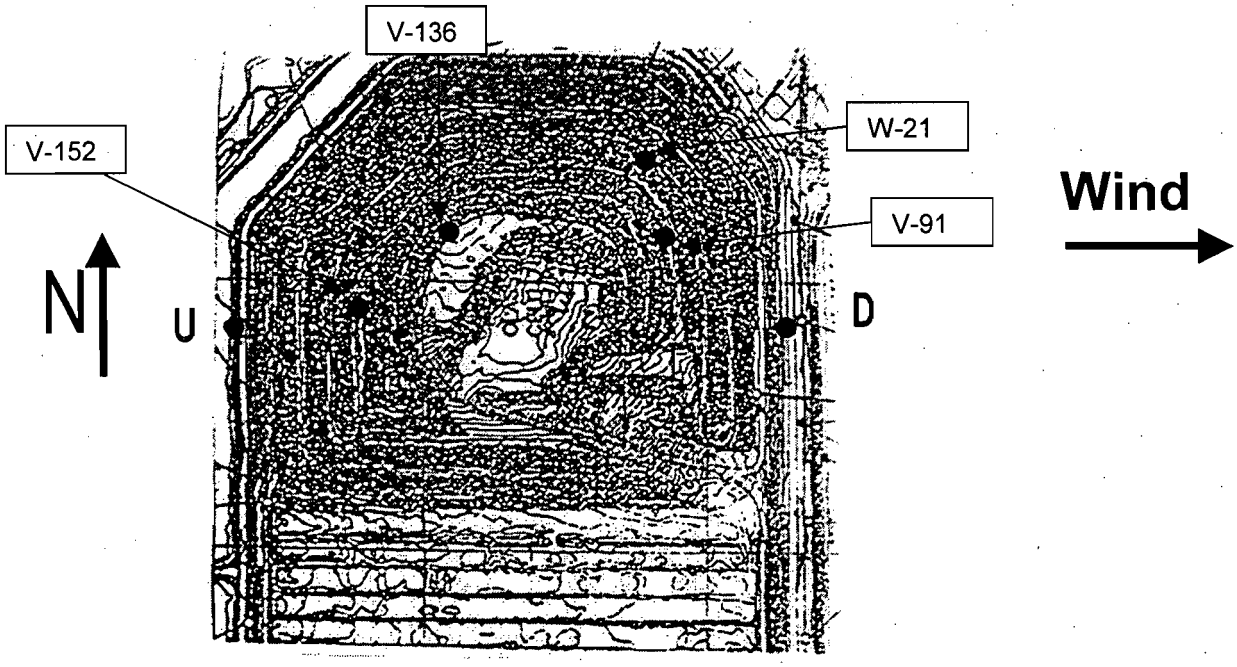
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **1/12/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 8.5 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 7.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 8.0 = Background Methane Concentration

Meteorological conditions: 68° F, 37% RH, Winds 6 MPH from the West.

Surface Methane Concentration Data Form

Date: 1/12/2004

Weather Conditions: 68° F, 37% RH, Winds 6 MPH from the West.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 1/12/2004

Background methane concentration (ppm) = 8.0 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	2580	2580	2572
V-136	Y	No Exceedance		
W-21	Y	No Exceedance		
V-152	Y	724	724	716

Notes:

Calibration Precision Data and Calculation Form

Date: 12/12/2003 **AK (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 12/12/2003

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1.1	494	493	7
2	.1	494	494	6
3	.1	494	494	6

Average = $\Sigma(D - A) \div 3$= 6.3 = **E**

Calibration Precision = E ÷ A x 100= 1.2%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 12/12/2003

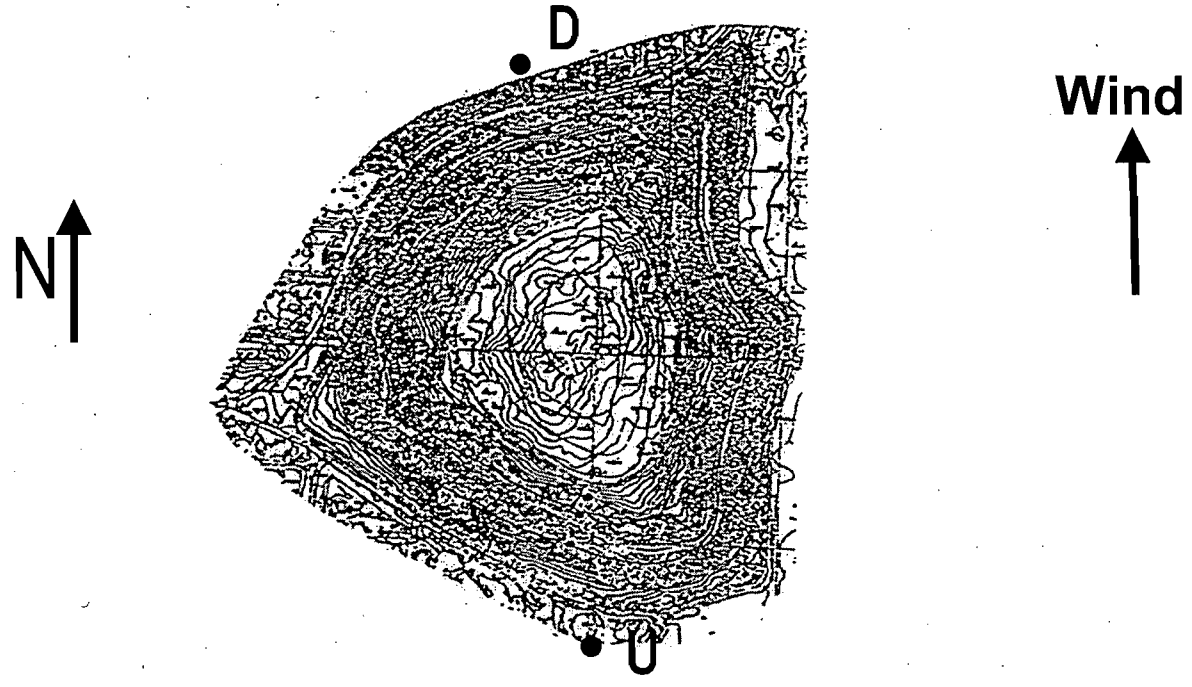
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **12/12/2003**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.0 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 7.1 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.5 = Background Methane Concentration

Description of meteorological conditions/notes: 66° F and 60% RH, Winds from S at 9 mph, clear.

Surface Methane Concentration Data Form

Date: 12/12/2003

Weather Conditions: 66° F and 60% RH, Winds from S at 9 mph, clear.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 12/12/2003

Background methane concentration (ppm) = 6.5 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

Notes: _____

Calibration Precision Data and Calculation Form

Date: 12/18/2003 **Inactive Class III (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers/M. Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 12/18/2003

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.2	493	493	7
2	.2	493	493	7
3	.1	493	493	7

Average = $\sum(D - A) \div 3$= 7.0 = **E**

Calibration Precision = E ÷ A x 100= 1.4%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

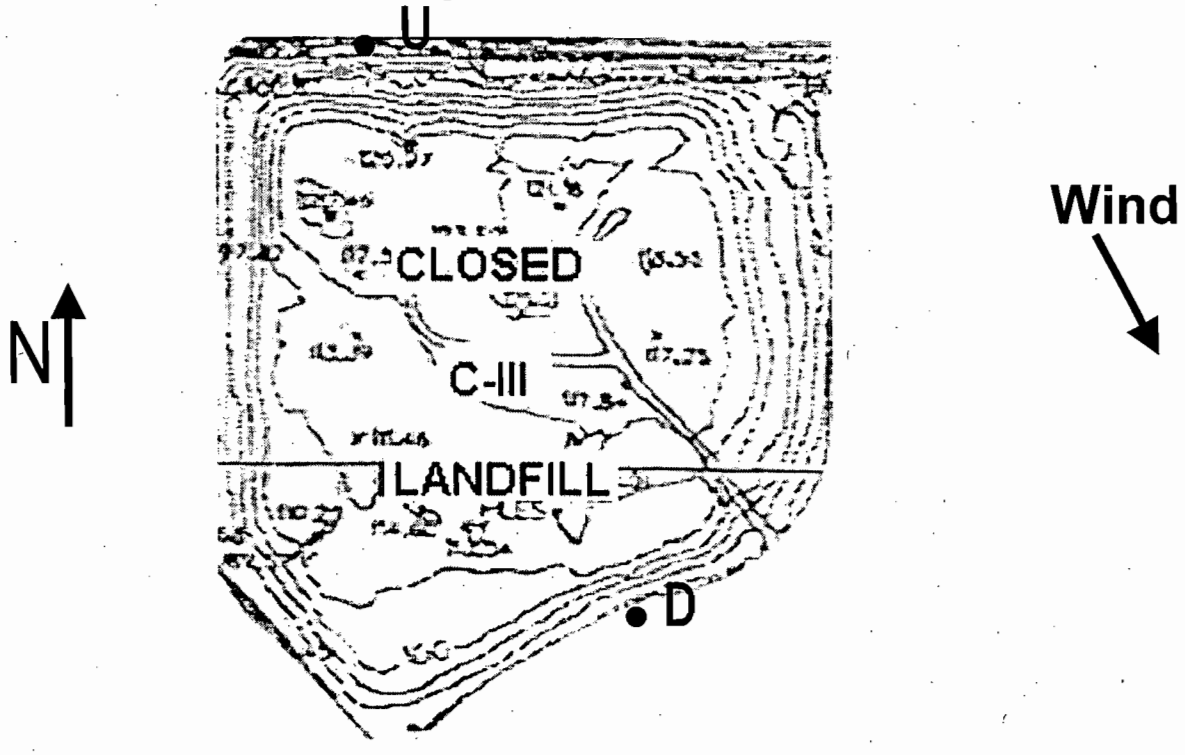
Date: 12/18/2003

Instrument make/model: TEI 680 HVM; **Instrument serial number**: 680-65793-350

Name of Person performing background concentration test: M. Rogers/M. Stewart

Date of instrument calibration: **12/18/2003**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 3.8 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 4.0 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 3.9 = Background Methane Concentration

Description of meteorological conditions/notes: 58° F, 31% RH, Winds from N/NW at 14 mph, clear.

Surface Methane Concentration Data Form

Date: 12/18/2003

Weather Conditions: 58° F, 31% RH, Winds from N/NW at 14 mph, clear.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: M. Rogers/M. Stewart

Date of instrument calibration: 12/18/2003

Background methane concentration (ppm) = 3.9 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 12/19/2003 **Cell Pre 85 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers/M. Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 12/19/2003

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1.8	500	498	2
2	2.2	494	492	8
3	0	493	493	7

Average = $\sum(D - A) \div 3$= 5.7 = **E**

Calibration Precision = E ÷ A x 100= 1.1%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 12/19/2003

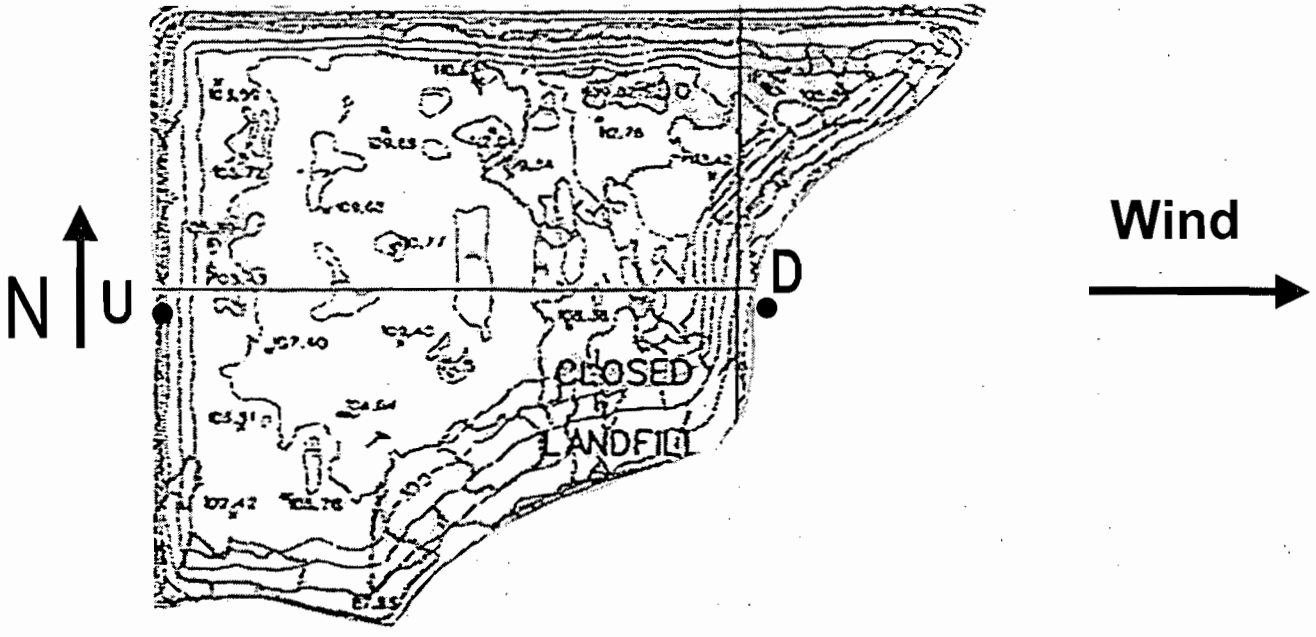
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers/M. Stewart

Date of instrument calibration: **12/19/2003**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 3.4 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.3 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 3.4 = Background Methane Concentration

Description of meteorological conditions/notes: 57° F, 31% RH, Winds from West at 17 mph.

Surface Methane Concentration Data Form

Date: 12/19/2003

Weather Conditions: 57° F, 31% RH, Winds from West at 17 mph.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers/M. Stewart

Date of instrument calibration: 12/19/2003

Background methane concentration (ppm) = 3.4 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

FOURTH QUARTER 2003
POST REMEDIATION
MONITORING

Calibration Precision Data and Calculation Form

Date: 2/13/2004 (Post Remediation INITIAL Test) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 2/13/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.1	494	494	6
2	0	493	493	7
3	0	494	494	6

Average = $\sum(D - A) \div 3$ = 6.3 = **E**

Calibration Precision = E ÷ A x 100= 1.3%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 2/13/2004

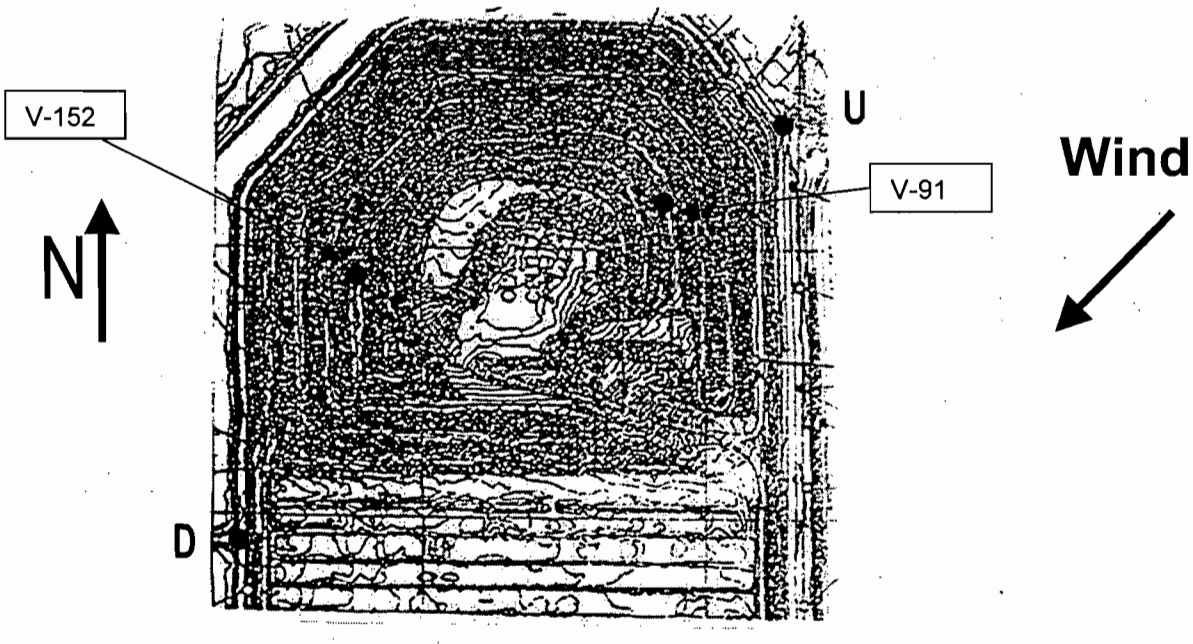
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **2/13/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 10.3 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 14.2 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 12.3 = Background Methane Concentration

Meteorological conditions: 69° F, 45% RH, winds generally from the northeast.

Surface Methane Concentration Data Form

Date: 2/13/2004

Weather Conditions: 69° F, 45% RH, winds generally from the northeast

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 2/13/2004

Background methane concentration (ppm) = 12.3 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	No Exceedance		
V-152	Y	No Exceedance		

Notes: _____

Calibration Precision Data and Calculation Form

Date: 2/23/2004 (10 Day Post Remediation test) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 2/23/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.2	494	494	6
2	.1	492	492	8
3	0	493	493	7

Average = $\sum(D - A) \div 3$ = 7.0 = **E**

Calibration Precision = E ÷ A x 100= 1.4%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 2/23/2004

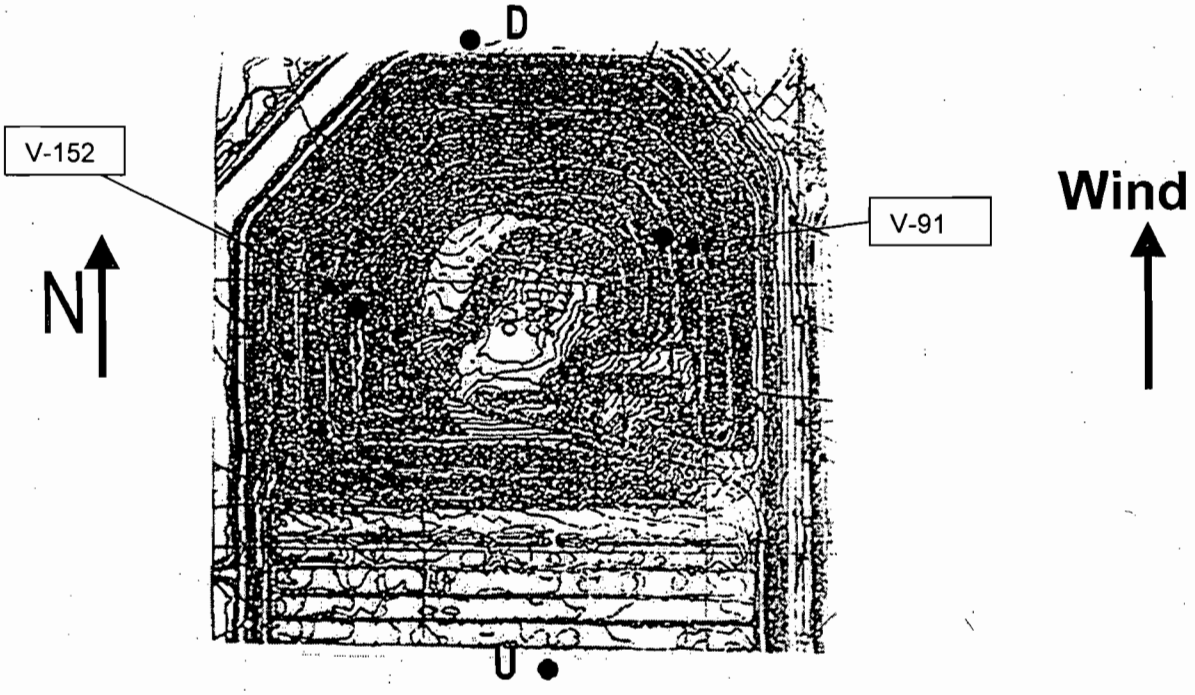
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **2/23/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 7.3 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 6.0 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.7 = Background Methane Concentration

Meteorological conditions: 79° F, 50% RH, Winds from the south at 12 MPH.

Surface Methane Concentration Data Form

Date: 2/23/2004

Weather Conditions: 79° F, 50% RH, Winds from the south at 12 MPH.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 2/23/2004

Background methane concentration (ppm) = 6.7 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	No Exceedance		
V-152	Y	No Exceedance		

Notes:_____

Calibration Precision Data and Calculation Form

Date: 3/4/2004 (20 Day Post Remediation test) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 = **A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/4/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	493	493	7
2	.1	494	494	6
3	0	494	494	6

Average = $\sum(D - A) \div 3$ = 6.3 = **E**

Calibration Precision = E ÷ A x 100= 1.3%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/4/2004

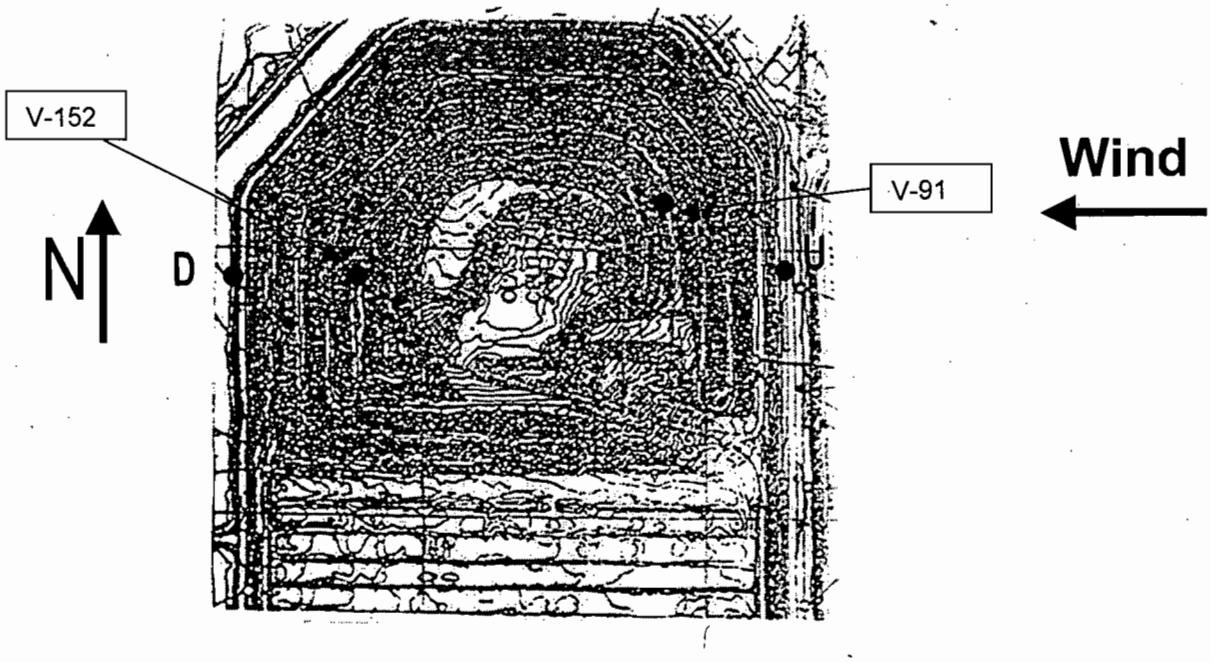
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **3/4/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 14.0 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 12.0 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 13.0 = Background Methane Concentration

Meteorological conditions: 79° F, 62% RH, Winds from the east at 12 MPH.

Surface Methane Concentration Data Form

Date: 3/4/2004

Weather Conditions: 79° F, 62% RH, Winds from the east at 12 MPH.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 3/4/2004

Background methane concentration (ppm) = 13.0 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	No Exceedance		
V-152	Y	No Exceedance		

Notes:_____

Calibration Precision Data and Calculation Form

Date: 3/12/2004 (30 Day Post Remediation test) **Cell 7B/8 (4th Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/12/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	494	494	6
2	.1	494	494	6
3	0	494	494	6

Average = $\sum(D - A) \div 3$ = 6.0 = **E**

Calibration Precision = E ÷ A x 100= 1.2%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/12/2004

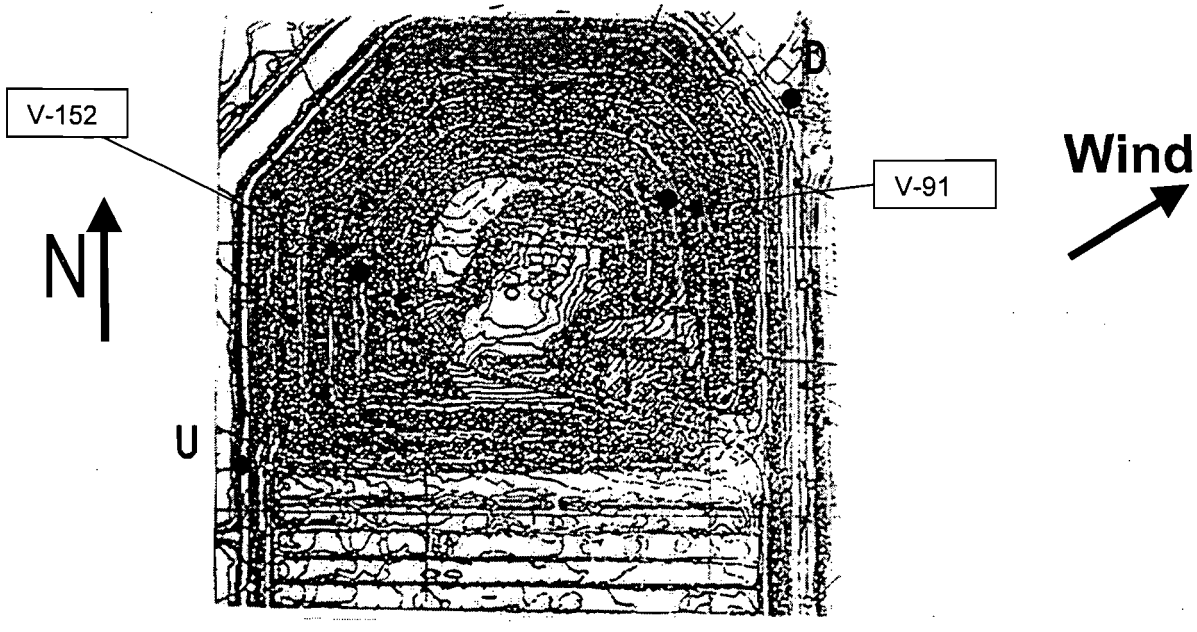
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **3/12/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.4 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 8.3 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 7.4 = Background Methane Concentration

Meteorological conditions: 74° F, 43% RH, Winds from the SW at 5 MPH.

Surface Methane Concentration Data Form

Date: 3/12/2004

Weather Conditions: 74° F, 43% RH, Winds from the SW at 5 MPH

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 3/12/2004

Background methane concentration (ppm) = 7.4 **= A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
V-91	Y	No Exceedance		
V-152	Y	No Exceedance		

Notes: _____

FIRST QUARTER 2004

Calibration Precision Data and Calculation Form

Date: 3/3/2004 (Testing started and completed) **Cell AK (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers/Michael S.

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/3/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	494	494	6
2	0	494	494	6
3	0	493	493	7

Average = $\sum(D - A) \div 3$= 6.3 = **E**

Calibration Precision = E ÷ A x 100= 1.3%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/3/2004

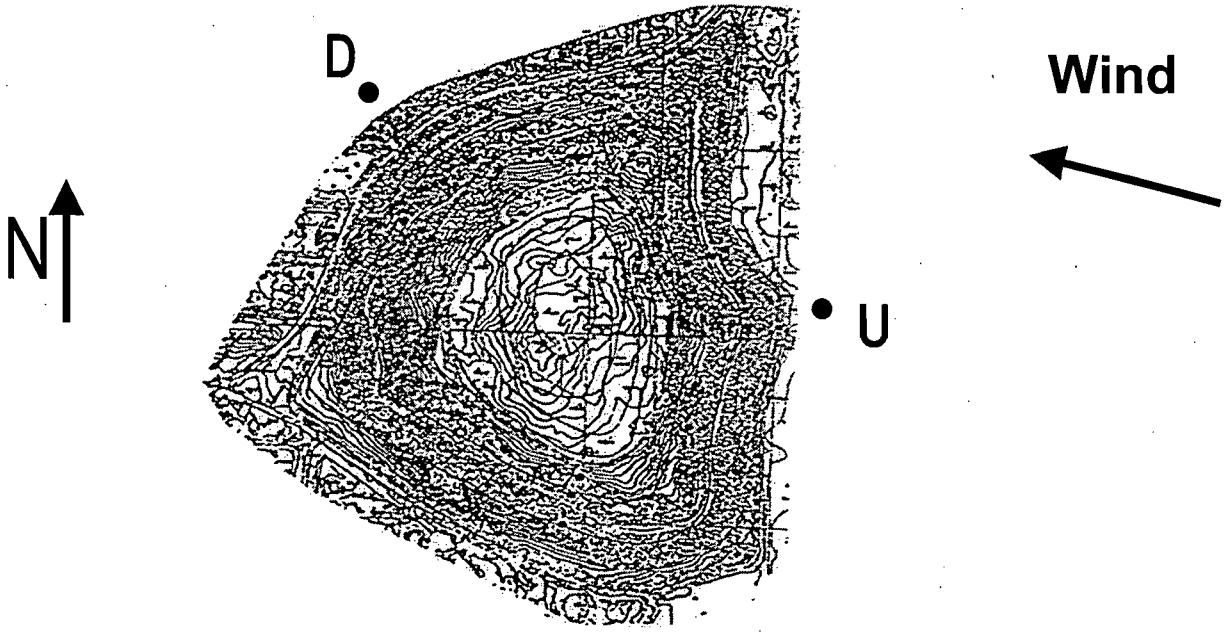
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers/M. Stewart

Date of instrument calibration: **3/3/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 10.6 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 9.4 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 10.0 = Background Methane Concentration

Description of meteorological conditions/notes: 77° F and 54% RH, Winds from ESE at 13 mph.

Surface Methane Concentration Data Form

Date: 3/3/2004

Weather Conditions: 77° F and 54% RH, Winds from ESE at 13 mph.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers/Michael S.

Date of instrument calibration: 3/3/2004

Background methane concentration (ppm) = 10.0 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 3/9/2004 (Testing started and completed) **Cell Pre 85 (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/9/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	494	494	6
2	.1	493	493	7
3	0	494	494	6

Average = $\sum(D - A) \div 3$= 6.3 = **E**

Calibration Precision = E ÷ A x 100= 1.3%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/9/2004

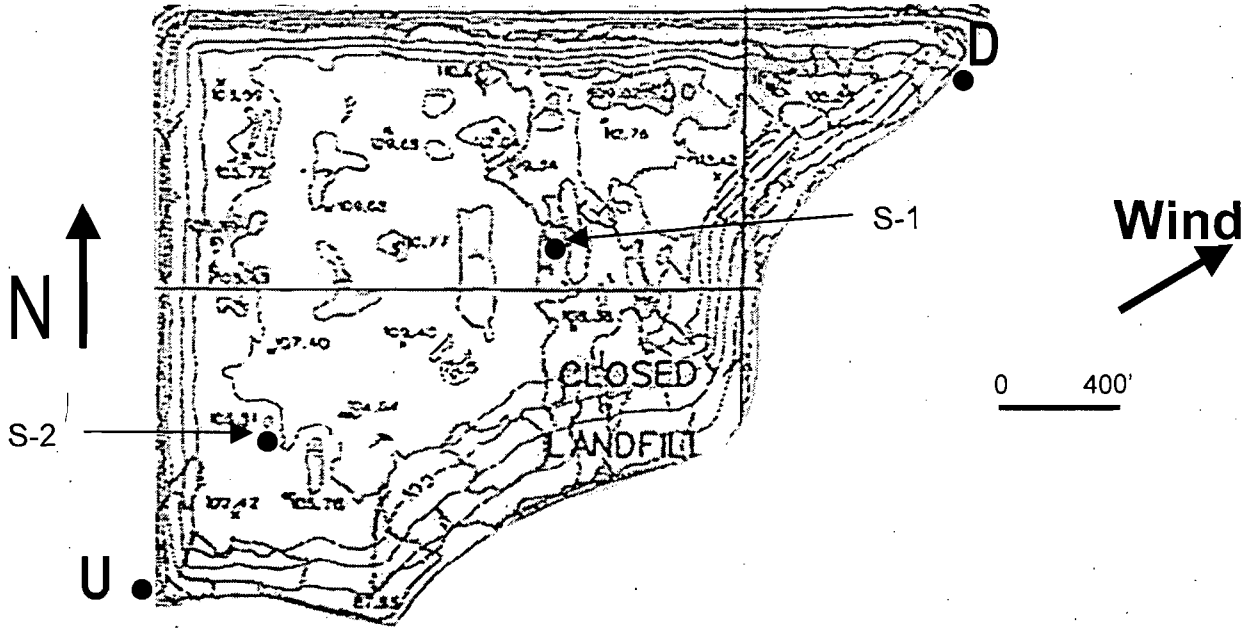
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **3/9/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 4.0 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 3.8 = Background Methane Concentration

Description of meteorological conditions/notes: 70° F, 26% RH, Winds from SW at 14 mph

Surface Methane Concentration Data Form

Date: 3/9/2004

Weather Conditions: 70° F, 26% RH, Winds from SW at 14 mph

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers/Ivan Portillo

Date of instrument calibration: 3/9/2004

Background methane concentration (ppm) = 3.8 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
S-1	N	716	716	712.2
S-2	N	800	800	796.2

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 3/18/2004 (10 Day Retest) **Cell Pre 85 (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Michael Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/18/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.1	498	498	2
2	.2	493	493	7
3	.1	500	500	0

Average = $\sum(D - A) \div 3$= 3.0 = **E**

Calibration Precision = E ÷ A x 100= .6%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/18/2004

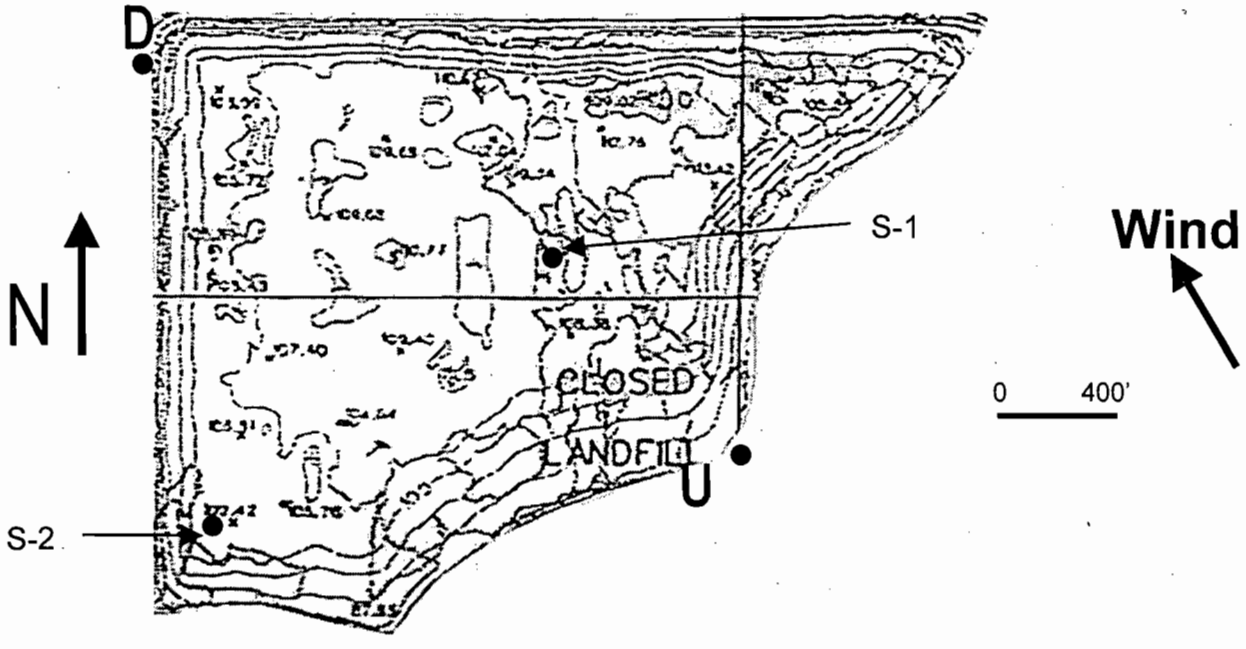
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers/M. Stewart

Date of instrument calibration: **3/18/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 6.5 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 5.8 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.2 = Background Methane Concentration

Description of meteorological conditions/notes: 78° F, 39% RH, Winds from SE at 9 mph

Surface Methane Concentration Data Form

Date: 3/18/2004

Weather Conditions: 78° F, 39% RH, Winds from SE at 9 mph

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers/M. Stewart

Date of instrument calibration: 3/18/2004

Background methane concentration (ppm) = 6.2 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
S-1	N		No Exceedance	
S-2	N		No Exceedance	

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 3/24/2004 (20 Day Retest) **Cell Pre 85 (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/24/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	496	496	4
2	.1	494	494	6
3	0	494	494	6

Average = $\sum(D - A) \div 3$= 5.3 = **E**

Calibration Precision = E ÷ A x 100= 1.1%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/24/2004

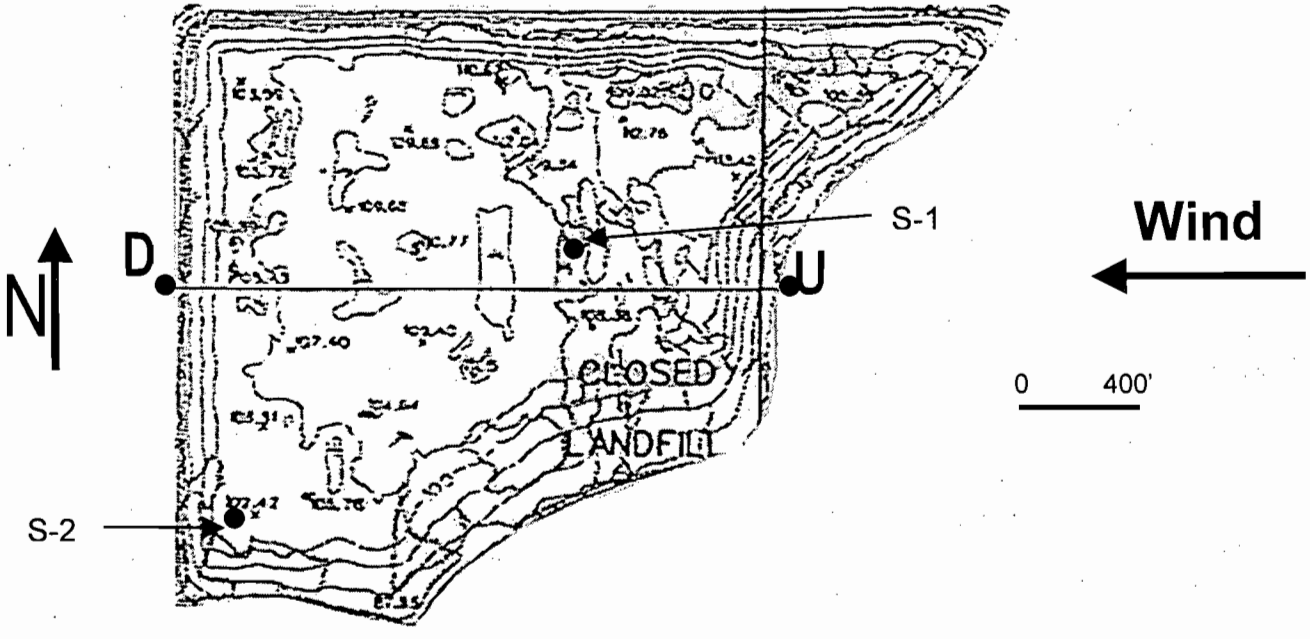
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **3/24/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 3.2 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 3.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 3.3 = Background Methane Concentration

Description of meteorological conditions/notes: 72° F, 48% RH, Winds from E at 22 MPH

Surface Methane Concentration Data Form

Date: 3/24/2004

Weather Conditions: 72° F, 48% RH, Winds from E at 22 MPH

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 3/24/2004

Background methane concentration (ppm) = 3.3 = A

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
S-1	N		No Exceedance	
S-2	N		No Exceedance	

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:_____

Calibration Precision Data and Calculation Form

Date: 4/8/2004 (30 Day Retest) **Cell Pre 85 (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Mike Rogers

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 4/8/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	1	496	495	5
2	.1	495	495	5
3	0	494	494	6

Average = $\sum(D - A) \div 3$= 5.3 = **E**

Calibration Precision = E ÷ A x 100= 1.1%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 4/8/2004

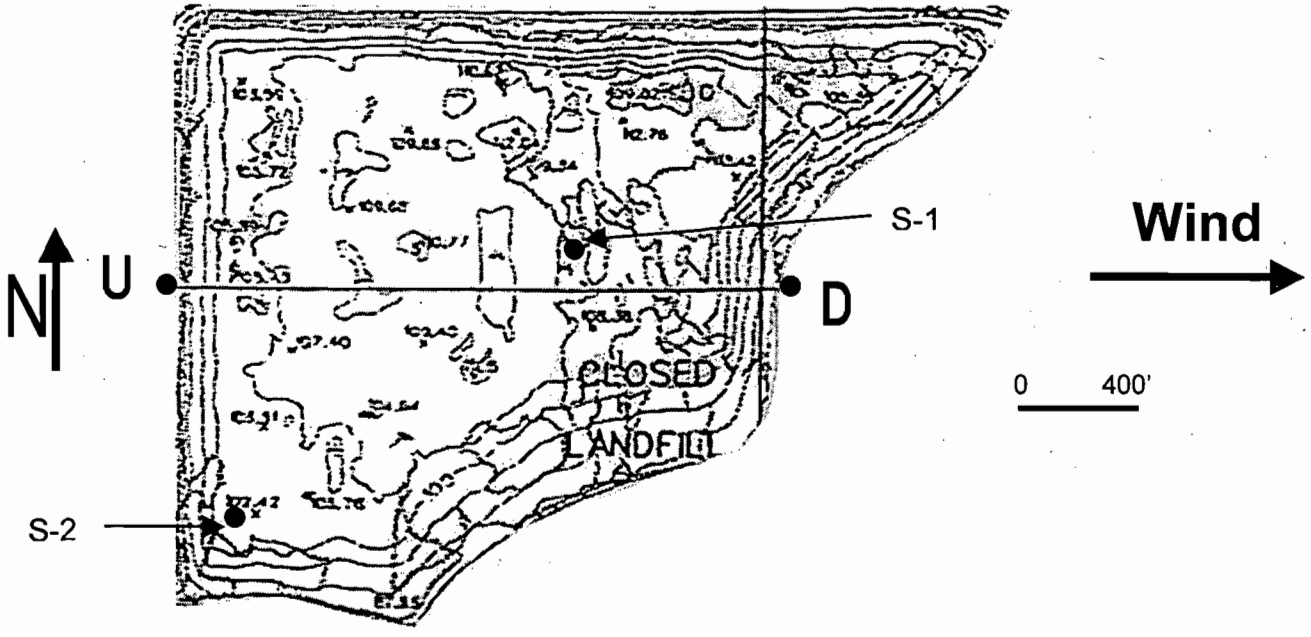
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers

Date of instrument calibration: **4/8/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 5.7 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 6.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 6.1 = Background Methane Concentration

Description of meteorological conditions/notes: 80° F, 58% RH, Winds from W at 10 MPH

Surface Methane Concentration Data Form

Date: 4/8/2004

Weather Conditions: 80° F, 58% RH, Winds from W at 10 MPH

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: 4/8/2004

Background methane concentration (ppm) = 6.1 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
S-1	N		No Exceedance	
S-2	N		No Exceedance	

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:_____

Calibration Precision Data and Calculation Form

Date: 3/17/2004 (Testing started and completed) **Inactive Class III (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Michael Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/17/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	0	493	493	7
2	0	497	497	3
3	0	494	494	6

Average = $\sum(D - A) \div 3 = 5.3 = \mathbf{E}$

Calibration Precision = $E \div A \times 100 = 1\%$

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/17/2004

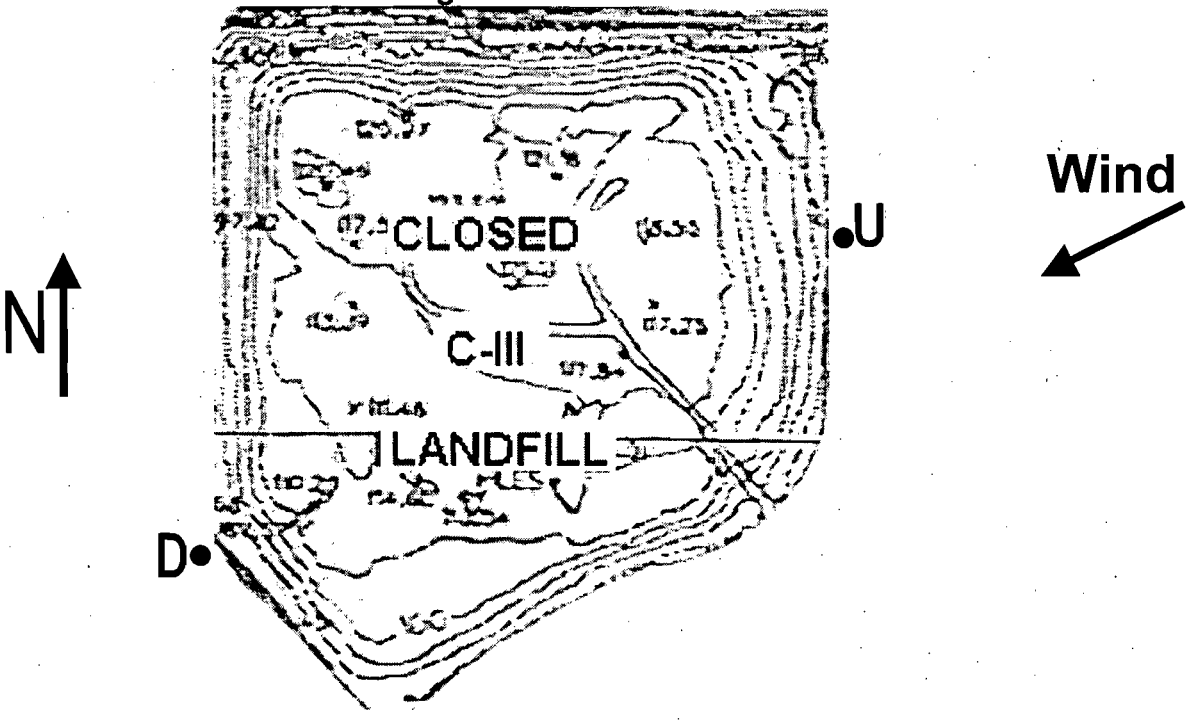
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers/M. Stewart

Date of instrument calibration: **3/17/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 3.5 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 4.3 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 3.9 = Background Methane Concentration

Description of meteorological conditions/notes: 78° F, 45% RH, Winds from NE at 10 mph, clear.

Surface Methane Concentration Data Form

Date: **3/17/2004**

Weather Conditions: 78° F, 45% RH, Winds from NE at 10 mph, clear.

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers/M. Rogers

Date of instrument calibration: **3/17/2004**

Background methane concentration (ppm) = 3.9 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)

No Exceedances

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes: _____

Calibration Precision Data and Calculation Form

Date: 3/18/2004 (Testing started and completed) **Cell 7B/8 (1st Q)**

Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of person performing calibration precision test: Michael Stewart

Date of zero gas certification: Nov. 30, 2000

Calibration gas concentration (ppm): 500 **= A**

Date of calibration gas certification: Nov. 30, 2000

Date of instrument calibration: 3/18/2004

Trial Number	Zero Gas Reading (B) (ppm)	Calibration Gas Reading (C) (ppm)	Net Calibration Gas Reading (D) [C - B=D] (ppm)	Difference D - A=Absolute Value (ppm)
1	.1	498	498	2
2	.2	493	493	7
3	.1	500	500	0

Average = $\sum(D - A) \div 3$ = 3.0 = **E**

Calibration Precision = E ÷ A x 100= 0.6%

If the calibration is greater than 10%, then the instrument is not acceptable for use.

Notes: _____

Background Methane Concentration Data and Calculation Form

Date: 3/18/2004

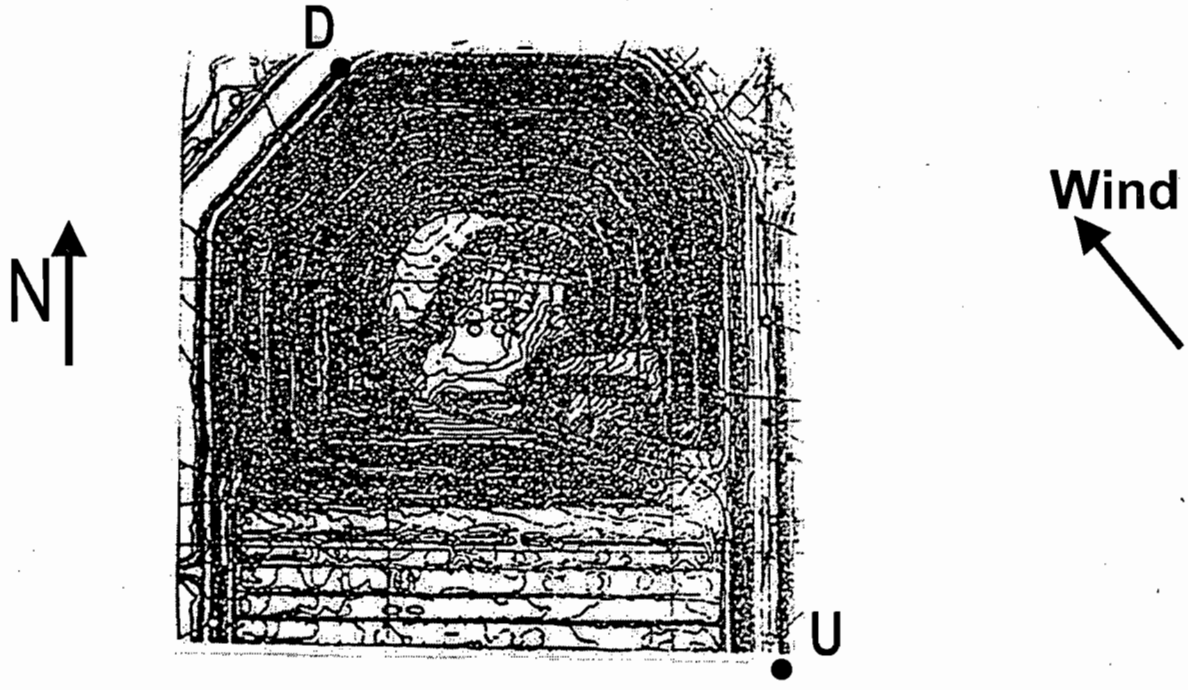
Instrument make/model: TEI 680 HVM

Instrument serial number: 680-65793-350

Name of Person performing background concentration test: Mike Rogers/M. Stewart

Date of instrument calibration: **3/18/2004**

Indicate wind direction on site diagram below:



Upwind methane concentration (ppm): 8.7 = **U**
Indicate with a "U" on site diagram the location where upwind concentration was taken.

Downwind methane concentration (ppm): 13.5 = **D**
Indicate with a "D" on site diagram the location where downwind concentration was taken

Average = (U+D) ÷ 2= 11.1 = Background Methane Concentration

Description of meteorological conditions: 78° F, 39% RH, Winds 9 mph from SE

Surface Methane Concentration Data Form

Date: **3/18/2004**

Weather Conditions: 78° F, 39% RH, Winds 9 mph from SE

Instrument make/model: TEI 680 HVM

Name of person performing surface methane monitoring: Mike Rogers

Date of instrument calibration: **3/18/2004**

Background methane concentration (ppm) = 11.1 = **A**

Location Identification*	Synthetic Cover (Y/N)	Initial FID Reading = B (ppm)	FID Reading with Carbon Filter Installed = C (ppm)	Methane Concentration Above Background = C-A (ppm)
		No Exceedances		

*Identify each location with a unique number and reference that reference that number on a map showing the monitoring route. Also, reference the identification number on data forms for subsequent remonitoring.

Notes:_____

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road ▪ Orlando, Florida 32829
407-836-6600 ▪ Fax 407-836-6629

TOM, TM File

November 16, 2004

RECEIVED
NOV 22 2004
Central Dist...

Mr. David McNeal
Air Resources Management
US EPA. Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-3104

Subject: **Orange County – AP**
Solid Waste Management Facility
FDEP Permit No. 0950113-002-AV
GCCS Design Plan Proposed Addendum

Mr. McNeal:

Please find enclosed for your consideration a proposal from our consultant to amend the Gas Collection and Control System Design Plan Standard Operating Procedure for Landfill Gas Extraction Wells for the Orange County Solid Waste Management Facility. As stated in the enclosed proposal, the standard operating procedures described are being submitted for EPA approval at the direction of the Florida Department of Environmental Protection.

Should you have any questions with regard to this letter please call me at 407-836-6616 or Dan Morrical at 407-836-6654.

Sincerely,

James W. Becker
Manager

JB/dm

Cc: L. T. Kozlov, P.E., Florida Department of Environmental Protection
Dan R. Morrical, P.E., Orange County Solid Waste Division
David H. Penoyer, P.E., SCS Engineers
Raymond J. Dever, P.E., DEE, SCS Engineers
John Sullivan, SCS Field Engineers
Rick DiGia, DTE Biomass Energy, Inc.

O:\FILE ROOM\LFG System\EPA Letter.doc

Environmental Consultants

3012 U.S. Highway 301 N
Suite 700
Tampa, FL 33619-2242

813 621-0080
FAX 813 623-6757

SCS ENGINEERS

November 9, 2004
File No. 09199036.17

Mr. Dan Morrical, P.E.
Orange County Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Subject: Addendum to the Gas Collection and Control System Design Plan
Standard Operating Procedure for Landfill Gas Extraction Wells
Orange County Solid Waste Management Facility, Orange County, Florida
FDEP Permit No. 0950113-002-AV

Dear Dan:

SCS Engineers (SCS) is providing you this letter for your use in petitioning the United States Environmental Protection Agency (U.S. EPA) to amend the landfill gas collection and control system (GCCS) design plan for the Orange County Solid Waste Management Facility. A similar letter was previously sent to Orange County on December 30, 2003, which was subsequently forwarded to the Florida Department of Environmental Protection (FDEP) Central District office. FDEP recently stated that they did not have the regulatory authority to approve the proposed actions included in this request, and recommended that the County forward the following proposed standard operating procedures to U.S. EPA for their approval.

As you know, in accordance with the New Source Performance Standards (NSPS) for municipal solid waste landfills, Orange County is required to operate each landfill gas (LFG) extraction well in compliance with certain criteria. Per Title 40 of the Code of Federal Regulations (CFR) Part 60.753(b), (c), and (d), Orange County is required to:

- Operate the collection system with negative pressure at each wellhead except under certain conditions such as increased well temperature, when a geomembrane cap is installed and an acceptable pressure limit is specified in the GCCS design plan, or when a landfill fire is present.

- Operate each wellhead with a LFG temperature less than 55 degrees Celsius (131 degrees Fahrenheit) and either a nitrogen level less than 20 percent or an oxygen concentration less than 5 percent by volume.

- Operate the GCCS so that the methane concentration at the surface of the landfill is less than 500 parts per million by volume (ppmv).

The first and third criteria listed above were included in the NSPS by the U.S. EPA in order to require landfill owners/operators to minimize fugitive emissions of LFG to the atmosphere. The second criterion, which is related to oxygen and nitrogen concentration in the gas at each well, is based on historical LFG industry operations and maintenance guidelines aimed at

reducing the potential for landfill fires or negatively affecting microbes involved in the anaerobic decomposition of the waste. High oxygen concentrations can occur due to operating the wellfield too aggressively, resulting in the infiltration of ambient air through the cover soils. If the oxygen concentration within a landfill exceeds five percent by volume, the possibility of a landfill fire is greatly enhanced. Note that because most field instruments measure oxygen, and not nitrogen, the method of compliance typically is based on a five percent oxygen concentration, rather than the 20 percent nitrogen requirement at each wellhead.

Unfortunately, the Rule does not provide guidance on how to address an individual criterion when it has the potential to conflict with one of the other criteria. For example, in some situations it may not be possible to maintain compliance with both the vacuum and gas quality requirements of the NSPS. This may be true in the case of a low or diminishing LFG generation rate, when the application of even a small vacuum (i.e., 0.1 to 0.5 inches of water column (in-w.c.)) to a well or collector may cause the oxygen concentration to exceed the NSPS limit of five percent. This typically occurs because LFG is not being generated at a sufficient rate to allow for continuous extraction by the GCCS.

If the LFG generation rate is so low, applying vacuum typically will only worsen the gas quality (i.e., increase the oxygen content), resulting in continued oxygen exceedances. One approach to remedying this situation is to shut down the well for a period of time until gas quality improves and the oxygen concentration declines to below five percent. Once the oxygen concentration is below this level, the well can be reopened and LFG extraction resumed. However, because this approach requires a non-negative pressure at the wellhead, this technique is not compliant with the NSPS.

Therefore, if gas quality cannot be maintained, the only alternative allowed by the NSPS is to decommission the well, provided there are no exceedances of the surface emissions monitoring limit. While such wells could be decommissioned, SCS feels it would be better to leave them in place in case future conditions render them necessary.

PROPOSED STANDARD OPERATING PROCEDURE

SCS proposes to establish the following standard operating procedure for wells at which poor gas quality is consistently recorded despite the application of minimal vacuum (i.e., less than 0.5 in-w.c.). This standard operating procedure is proposed as an addendum to the existing GCCS design plans for the site. It is not intended for wells at which normal wellfield tuning, maintenance, or repair activities can remediate the exceedances.

For wells at which oxygen exceedances are persistent and not the result of operations and/or maintenance issues, the wellhead valve will be adjusted to minimize vacuum. If after more than one hour of decreased vacuum the oxygen concentration does not decline to allowable levels, the wellhead will be shut off until the gas quality recovers. The well will continue to be monitored on a monthly basis, and the wellhead valve opened to purge any accumulated gas

and relieve any pressure that may have developed. If, during the routine monthly monitoring, the oxygen concentration is below five percent, the well will be brought back on line until the gas quality again declines.

Gas concentration and pressure will continue to be monitored and recorded during the months in which the wells are shut off. However, a zero pressure or high oxygen concentration will not be considered an exceedance of the wellhead operating criteria included in 40 CFR 60.753(b) and (c), and remedial actions including rechecks will not be required. If a positive pressure is recorded, the well will be reopened to relieve any pressure and to purge the accumulated gas from the well. If the gas quality has improved, the well will be opened and returned to service. However, if high oxygen concentrations are still present in the well, after purging the well and removing any positive pressure, the wellhead valve will again be closed and the well will not be monitored until the next round of monthly monitoring. Quarterly surface emissions monitoring will continue to be used to demonstrate the effective capture and control of LFG from the landfill. In the case of exceedance of the 500-ppmv surface emissions monitoring limit, standard remediation steps will be conducted, including evaluating the need for returning the well to full-time service.

Note that wells under this standard operating procedure will not be physically disconnected from the GCCS, which will allow the County to quickly return the wells to service if the need arises. In the future, if wells are to be permanently decommissioned, the County will submit a formal notice of well decommissioning to FDEP.

Please forward this proposed standard operating procedure/addendum to the GCCS design plan to the U.S. EPA at the following address:

Air Resources Management
United States Environmental Protection Agency, Region
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

Please copy the FDEP Central District office at the following address:

Air Resources Management
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Please call us if you have any questions or need additional information.

Sincerely,

No. 56065

David H. Penoyer, P.E.
Project Manager

Raymond J. Dever, P.E., DEE
Vice President
SCS ENGINEERS

cc: John Sullivan, SCS Field Services

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUNTY UTILITIES – SOLID WASTE DIVISION
5901 Young Pine Road • Orlando, Florida 32829
407-836-6600 • Fax 407-836-6629

T2A
3-23-05

RECEIVED
MAR 21 2005
Central Dist. - DEP

March 15, 2005

Mr. Thomas J. Mulligan
Central District – Air Section
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Subject: Addendum 1 - Semi-Annual New Source Performance Standard and Startup, Shutdown, and Malfunction Report,
July – December 2004
Orange County Solid Waste Management Facility
Permit Number: 0950113-003-AV

Mr. Mulligan:

As we discussed on the phone, after submitting the subject Semiannual NSPS/SSM Report on January 28, 2005, we discovered that the first SSM event of the July – December 2004 time period was inadvertently left out. Therefore, as you directed, this addendum provides a revised page 4 of the narrative with the number of SSM events changed from 17 to 18, an updated Downtime Table for the Pre-1985 and Class III Landfill gas flare to replace the table currently in Appendix D and a Startup, Shutdown, and Malfunction (SSM) Form with attached SSM Plan Departure Form for adding to Appendix G.

Please call Dan Morrical at (407) 836-6654 or me at (407) 254-9660 if you have any questions.

Sincerely,

James W. Becker
Manager

Enclosure

Copy: Dan Morrical, P.E., Chief Engineer, Orange County Solid Waste Division
James Nissen, P.E., Brown and Caldwell
David Penoyer, P.E., SCS Engineers

7.0 Surface Emissions Monitoring

Surface Emission Monitoring (SEM) was performed between July and September 2004 by SCS and between October and December 2004 by Brown and Caldwell. The results of this monitoring are summarized below. The quarterly reports prepared for each round of monitoring are included in Appendix E.

Third Quarter 2004 Monitoring

Only two exceedances of the 500 ppm methane threshold were observed during this round of monitoring, each on Cell 7B. The problems associated with the exceedances were repaired and the 10-day and 30-day re-check of the areas were below the 500 ppm threshold.

Fourth Quarter 2004 Monitoring

Ten exceedances of the 500 ppm methane threshold were observed during this round of monitoring. Three exceedances were observed on the Pre-1985 Landfill, three on the Class III Landfill, and four on the Cell 7B/8 Landfill. The A-K Landfill did not have any exceedances during this round of monitoring.

The locations with exceedances were initially repaired by applying additional soil over the areas. The 10-day recheck of the locations did not indicate any further exceedances, except on the Pre-1985 Landfill at one location. This location was repaired further, and the second 10-day recheck did not show an exceedance. No exceedances were observed during the 30-day recheck.

8.0 Landfill Gas Collection System Modifications

A total of seven wells at the top of the Cell 7B Landfill were modified to allow for future additional waste disposal in this area. Four of the wells (EW-44, 45, 47, and 47A) were lowered. As shown in the sketch in Appendix F, the wellhead on each of these four wells was removed, the well and lateral pipe stickup cut off below grade, and the well reattached directly to the header pipe. These wells can now be controlled by new Valves 47B and 46A shown in the sketch. In addition to the four wells that were lowered, three wells (EW-38, 39, and 46) were raised approximately 10-feet to allow waste disposal in the area.

SCS and DTE indicate that no further modifications were performed on the GCCS for the landfills. Therefore, no plans for the GCCS systems have been included with this submittal since drawings illustrating the GCCS for each landfill are already on file with the FDEP.

9.0 Start-up, Shutdown, and Malfunction Events

A total of 18 startup, shutdown, and malfunction events occurred at the Pre-1985 and Class III Landfills between July and December 2004. The SSM forms prepared during these events are included in Appendix G of this submittal. A total of 39 startup, shutdown, and malfunction events occurred at the A-K and

System Downtime, July-Dec 2004 Pre-1985 and Class III Landfill Orange County Solid Waste Management Facility

Date	Hours
7/6/2004	161
7/19/2004	0.50
5/19/2004	0.83
8/31/2004	22.00
9/5/2004	31.00
9/8/2004	1.50
9/22/2004	1.00
10/19/2004	1.00
10/30/2004	2.00
11/9/2004	6.00
11/11/2004	6.83
12/8/2004	0.50
12/8/2004	1.00
12/11/2004	66.50
12/27/2004	0.75
12/27/2004	1.50
12/27/2004	0.75
12/27/2004	0.55
Total	305.21

Notes

1. Data obtained from SSM Forms prepared by SCS Engineers (Attachment G)

2 The event beginning on July 6 was the only event during this period to exceed five consecutive days. At no time was LFG permitted to vent freely and uncombusted from the flare.

ORANGE COUN ' UTILITIES – SOLID WASTE I ISION
5901 Young Pine Road • Orlando, Florida 32829
407-836-6600 • Fax 407-836-6629

July 14, 2004
File No. 09199036.16

Mr. Thomas Mulligan
Florida Department of Environmental Protection
3319 Maguire Boulevard , Suite 232
Orlando, Florida 32803-3767

Subject: Notice of Startup, Shutdown, or Malfunction Event
Class III and Pre-1985 Landfill Gas Collection and Control System
Orange County Solid Waste Management Facility, Orange County, Florida
Permit No. 0950113-002-AV

Dear Mr. Mulligan:

This letter is to inform you of a recent malfunction of the landfill gas collection and control system (GCCS) for the Class III and Pre-1985 landfills at the Orange County Solid Waste Management Facility. As you know, the landfill is subject to both the New Source Performance Standards (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Under NESHAP, Orange County is required to have a Startup, Shutdown, and Malfunction (SSM) Plan for the GCCSs operated on site. As part of the SSM Plan, and as required by the NESHAP, if actions taken during a SSM event are not consistent with the SSM Plan, the County is required to notify the Florida Department of Environmental Protection (FDEP) in writing within 7 days of commencing such actions.

On July 6, 2004, at approximately 6:00 p.m., a power outage resulted in the shutdown of the GCCS, when two fuses were blown on the power pole servicing the blower/flare station. No other facilities on site were affected. As you know, per the NSPS (40 CFR 60.757(f)(4)), the GCCS cannot be offline for more than five days. Because the fuses on the power pole were not repaired and the system not restarted until 2:00 p.m. on July 12, 2004, the GCCS was offline for more than the allowable five days. Therefore, the County considers this to be a deviation from the SSM Plan.

The County has taken immediate steps to ensure that this situation does not occur again in the future. The County is investigating why the autodialer did not properly notify site personnel of the downtime, and is preparing to install a battery back-up to ensure that the autodialer remains functional in case of future outages. Modifications to the warning lights may also be implemented. Site personnel will be trained to make more thorough, routine checks of the system to confirm proper operation daily.

The County will also update the current SSM Plan, which is dated January 16, 2004, to address this situation in case of a future similar malfunction due to power failure. The revised SSM Plan will be submitted to FDEP with the next semi-annual SSM/NSPS report.

Please find the attached copies of the malfunction report form and SSM departure report form.

Please call Dan Morrical, P.E., at (407) 836-6654 if you have any questions or need additional information.

Sincerely,

James W. Becker
Manager

c: Dan Morrical, P.E., Chief Engineer, Orange County Solid Waste Division
David Penoyer, P.E., SCS Engineers
Mike Rogers, P.G., Environmental Specialist, Orange County Solid Waste Division

Startup/Shutdown/Malfunction Report Form

Section 1 - All Events

List effected piece(s) of equipment: Power Outage, OUC

Type of Event	Military Time Date/Time Start	Military Time Date/Time End	Duration (hours)	Event Code (see back of form)	SOP* Followed? Yes	SOP* Followed? No**
☐ Startup						
☐ Shutdown						
☒ Malfunction	7/6/04 9:00AM	7/13/04 2:00PM	161	16	Complete Section 2 Below	

Date Form Filled Out: 7/13/04 **Signature:**

* Standard Operating Procedure (SOP) for Flare Startups (Manual & Automatic) and Shutdowns are provided in SSM Plan
If SOP in SSM Plan was not followed, **notify site engineer immediately.

Section 2 - Malfunction Events Only

Step	Corrective Action Procedures for All Malfunctions	P Check one of the following for each step: Procedure completed	Procedure Not Applicable
1.	Determine if landfill gas is being released to the air (can you smell landfill gas, or measure/detect gas flow?).	☒	
2.	If landfill gas is being released to the air, notify personnel on "Contact List".	☐	☒
3.	Determine if the malfunction is causing an unsafe operating condition (air entering landfill or piping, smoking, vibration, or other problem), which may harm people, the environment or the landfill gas control equipment.	☒	
4.	If unsafe operating condition exists, or landfill gas is being released to the air, stop (if possible) landfill gas flow.	☐	☒
5.	If Control device or other system component is shutdown due to Step 4, follow Shutdown SOP and Complete Section 1 - "Shutdown".	☐	☒
6.	Determine if other personnel/resource (qualified technician, electrician, consultant or other) are needed for malfunction diagnosis.	☒	
7.	If additional personnel needed, notify qualified personnel: a. Record contact name, date and time: OUC, 7/13/04 b. Contact site representative with information recorded in #7.a.	☒	☐
8.	Start malfunction diagnosis.	☒	
9.	Determine if other resources are needed to fix the malfunction (qualified technician, electrician, contractor, on-site resources, manufacturer's representative, or other).	☒	
10.	If additional resources needed, contact qualified resource: a. Record contact name, date and time: b. Contact site representative with information recorded in #10.a.	☐	☒
11.	Fix the malfunction.	☒	
12.	Once the malfunction is fixed, re-start the system per SOP if it had been shut down, and record start-up times and dates on this form.	☒	☐
13.	Record date that malfunction occurred, date that malfunction was repaired, and total time that system was out of service in boxes in Section 1 of this form.	☒	
14.	Sign this form, copy it, and place it in the Start-up, Shutdown, Malfunction file.	☒	
15.	If the procedures listed above were not followed, contact the site engineer immediately.	☐	☒

SSM PLAN DEPARTURE REPORT FORM
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

1. Type of Event: ☐ Startup ☐ Shutdown ☒ Malfunction

2. Date: 7/6/04 - 7/13/04 Time: 9:00PM / 2:00PM Duration: 161 hours

3. Provide detailed explanation of the circumstances of the startup, shutdown, or malfunction:*

Power outage was caused by blown fuses in Orlando Utilities Commission transformer in electrical line that provided power to the flare.

4. Provide description of corrective actions taken:*

Standard Operating Procedure for malfunction event was followed.

5. Describe the reasons the SSM Plan was not followed:*

Malfunction repair exceeded five days.

6. Describe any proposed revisions to the SSM Plan:*

The County will update the current SSM Plan to address the situation in case of future similar malfunction due to power failure. A battery back-up to ensure that the auto dialer remains functional in case of future outages will be installed.

7. Name (print): Adam Baughman

8. Title Staff Professional

*Use additional sheets if necessary.

Note: If the event documented in this form was a malfunction and if the SSM plan needs to be revised to address the particular type of malfunction that occurred, the revision of the SSM plan must be made within 45 days of the event.

TJM 2-23-05
Tom File

CH2M/WCG

The Joint Venture

2600 Lake Lucien Drive □ Suite 117 □ Maitland, Florida 32751 □ (407) 647-6623 FAX (407) 539-0575

Orange Co. Landfill

RECEIVED
OCT 2 8 2004
Central Dist. - DEP

October 25, 2004

Mr. Leonard T. Kozlov, P.E.
Program Administrator
Air Resources Management
Central District
Florida Department of Environmental Protection (FDEP)
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

RE: Class I Landfill Expansion (Cell-9) - Southern Expansion Site
FDEP- Title V Permit Modification & Other Requirements
Permit No. 0950113-002
Orange County Solid Waste Management Facility (OCSWMF)

Dear Mr. Kozlov:

We appreciate your time meeting with us on October 13, 2004 to discuss the above referenced Title V (T-V) Facility and status of the County's landfill expansion project. As suggested during the meeting, please consider this letter a written request for clarification of FDEP requirements for the T-V air operation permit. Our understanding of the discussions held during the meeting follows.

- The information regarding the portion of the landfill gas (LFG) management system for the Southern Expansion Site (SES) installed during this phase of construction will be certified for completion as part of the solid waste construction permit. It was discussed that a control system will need to be constructed and operational after waste is in place for five (5) years. Reporting requirements for Cell 9 will start after the fifth year.

- The Orange County Solid Waste Management Facility is currently operating under the above referenced T-V air operating permit. The existing T-V Operation Permit may require modification for inclusion of the new expansion areas within 180-days after solid waste disposal operations begin.

- The County has historically maintained a good neighbor policy at the OCSWMF. To continue with this policy, the County proposes to install horizontal LFG vents in the waste as part of operations, similar to those currently installed at Cell 7B/8. As a component of an odor control operation, the County is proposing to collect the LFG from these horizontal vents and

destroy the gases at a temporary skid-mounted flare. This would strictly be an odor control measure and is not an air operation permit requirement; therefore a modification to the Title-V permit is not required and the reporting requirements of Title-V are not applicable.

- The County is planning to file a solid waste application with FDEP to close the current Cell 7B/8 disposal area once Cell-9 becomes fully operational. The T-V permit requires a Landfill Closure Report to be submitted within 30-days of refuse acceptance cessation.

The following questions require clarification as soon as possible.

1. Please confirm that an active control system is not required to be operational for Cell-9 until five (5) years after initial placement of solid waste in Cell 9.
2. Please describe what needs to be submitted to FDEP to modify the T-V Operation Permit for operation of the Cell-9 disposal area and the required time frame for submittal.
3. Please confirm that the temporary flare proposed as a possible odor control measure does not require a modification of the Title-V permit.
4. Please confirm that the temporary flare proposed as a possible odor control measure does not require T-V reporting until five (5) years after waste placement in Cell 9.
5. Please confirm that submittal of a copy of the FDEP Solid Waste Closure Permit Application to the Air Resources Group will serve as the Landfill Closure Report required by the T-V Permit.

Should you have any questions or comments please contact me at your earliest convenience.

Very truly yours,

CH2M/WCG - JOINT VENTURE

Ron S. Beladi, P.E.
Project Manager

C: Mrs. Vivian F. Garfein, Director, FDEP-Central District
Mr. Jim Becker, Manager, Orange County Solid Waste Division
Mr. Dan Morrical, P.E., Chief Engineer Orange County Solid Waste Division
Mr. Jim Flynt, P.E., Senior Engineer, Orange County Solid Waste Division
Mr. Bo Bruner, P.E., CH2M/WCG - Joint Venture

PIUO File 10-13-04

Orange Co. Landfill

Name	Org	
LEN KOZLOV	DEP	
VIVIAN GARFEIN	DEP	
Jim Becker	Orange County Solid Waste	407 836-6616
Dan Morrical	" " " "	407-836-6684
Alan Zahm	DEP	
TOM MULLIGAN	DEP	
JIM FLYNT	OCUSA	
Bo Brewer	CH2M/WCG	
RON BELADI	CH2M/WCG	

Agenda

Meeting with FDEP-Air Section
Orange County Landfill Southern Expansion Site
& Operation of Cell-9
Orange County Solid Waste Management Facility

FDEP Central District Office-
October 13, 2004, 1:30 p.m.

Topics:

1) Introductions

2) Overview of Class-I Landfill Expansion-Project Status

3) Cell-9 Class-I Solid Waste Disposal Area Operations & LFG System

4) County's Plan for Initial Odor Control Using Skid-Mounted Flare

5) Title V Requirement Interpretations

   a) T-V Permit Update- SS 60.14 (g)

   b) Active Collection & Control System Requirement & Timing- SS 60.752 (b) (2)(ii)

6) Reporting Requirement

7) Other Agency Issues

David Biderman is the general counsel for the National Solid Wastes Management Association (NSWMA). He can be reached at 202/364-3743 or davidb@envasns.org. NSWMA monitors flow control developments throughout the United States. NSWMA publishes a monthly newsletter, the Legal Bulletin, that keeps members and subscribers up-to-date on flow control, interstate and other legal decisions affecting the solid waste industry.

THE TECH CORNER – LANDFILL GAS AND NEW SOURCE PERFORMANCE STANDARDS UNDER THE CLEAN AIR ACT

Mike McLaughlin

The U.S. Environmental Protection Agency (EPA) promulgated New Source Performance Standards (NSPS) for municipal solid waste (MSW) landfills on March 12, 1996. The NSPS, found at 40 CFR 60, Subpart WWW, require owners and operators of relatively large landfills to design, install, operate and monitor a landfill gas collection and control system (GCCS) on a specific time schedule, and to file a number of compliance reports with the appropriate regulatory agency.

Recent enforcement initiatives in EPA Region 3 and elsewhere have shown that compliance with the NSPS regulations is challenging for a number of sites. From EPA's perspective, NSPS inspections are "productive," in the sense that inspections have uncovered areas of noncompliance requiring enforcement orders and penalties. This article will summarize the NSPS regulations, and then discuss several areas of concern for landfill owners and operators based on recent enforcement actions, together with strategies for compliance.

As written, the NSPS for landfills is based on control of non-methane organic compounds (NMOCs) present in landfill gas. Methane and carbon dioxide are the predominant components of landfill gas, and NMOCs typically make up only a small fraction (a few hundred parts per million, or ppm) of landfill gas at a typical site. Older landfills that may have received significant amounts of solvents may have higher concentrations of NMOCs.

Applicability of NSPS

NSPS applies to active and closed landfill sites. In EPA's view, landfills that are affiliated in some way with nearby active or closed landfills may be aggregated for purposes of determining applicability of NSPS. All of the following criteria must be met for NSPS to apply:

1. The facility must be an MSW landfill, in part or in full. The rule does not apply to hazardous waste landfills, sludge landfills, industrial landfills, or construction and demolition debris landfills.

2. The facility must have received MSW waste on or after Nov. 8, 1987. Landfills that had ceased receiving MSW prior to that date are not captured by the NSPS rule.

3. The facility must have a design capacity at or above 2.5 million metric tons (Mg), and 2.5 million cubic meters of MSW. Design capacity is usually based on permits held with state solid waste regulatory agencies. Since a landfill containing 2.5 million Mg almost certainly will have a volume greater than 2.5 million cubic meters, the 2.5 million-Mg value will control NSPS applicability.

4. The facility must be shown to emit more than 50 Mg per year of NMOCs. This determination is made by applying any of several models established by EPA, using either default values or site-specific values. Use of site-specific values will almost certainly yield a lower NMOC emission rate than use of EPA's default values.

Compliance Schedule

Compliance with NSPS requires a sequence of activities, beginning with a determination of whether a given landfill meets the four criteria listed above. For large landfills that first received waste on or after May 30, 1991, (the date of the first draft publication of the NSPS rules in the Federal Register), or that increased their capacity to become a large landfill after that date, specific deadlines were included in the rule, as follows:

- 03/12/96 – NSPS rule promulgated.
- 06/10/96 – Design Capacity Report due.
- 06/10/96 – Tier 1 gas model due (if applicable).
- 12/07/96 – Tier 2 report due (if performed).
- 06/10/97 – Tier 3 report due (if performed).
- 06/10/97 – GCCS Design Plan due (if required).
- 12/10/98 – System construction complete (if applicable).
- 03/10/99 – Surface emissions monitoring, first round due (if applicable).
- 06/08/99 – Initial operations report due (if applicable).

For other landfills, the specific deadlines for NSPS compliance reporting are a function of state Emission Guideline (EG) program requirements and formal approvals (of the state programs) by EPA. The following schedule applies:

- 0 days – effective date of EG.
- 90 days from effective date above – Design Capacity Report due.
- 90 days from effective date above – Tier 1 gas model due (if applicable).
- 180 days from Tier 1 above – Tier 2 report due (if performed).
- 1 year from Tier 1 above – Tier 3 report due (if performed).
- 1 year from Tier 1 above - GCCS Design Plan due (if required).
- 18 months from Design Plan above – System construction complete (if applicable).
- 3 months from system construction above – Surface emissions monitoring, first round due (if applicable).
- 180 days from system construction above – Initial operations report due (if applicable).

Note that the EG program for older landfills includes interim deadlines not contained in the program for newer landfills. These deadlines follow submission of the GCCS Design Plan, and require awarding a contract for construction of the GCCS within four months of submitting the plan, and commencing construction no later than six months thereafter.

Testing for 50 Mg/Year NMOC Threshold: Trail of Tiers

The astute reader will note there are three tiers of testing and gas models provided in the NSPS rule for the purpose of determining whether the NSPS threshold of 50 Mg per year is triggered. The three different models require an increasing amount of site-specific information as Tier 1 yields to Tier 2 yields to Tier 3 testing. In summary:

- Tier 1 uses a gas production model that results in high NMOC emission rates. Assumes NMOC content of landfill gas is 4,000 ppm.

- Tier 2 uses actual NMOC concentration of landfill gas at the site is measured, and substituted for 4,000 ppm value used in Tier 1. Based on results collected by our firm from almost 200 landfills, NMOC concentrations in modern landfills range between about 50 and 1,000 ppm, with an average concentration of 340 ppm and a median concentration of about 290 ppm. Thus, typical NMOC concentrations are more than an order of magnitude below the 4,000 ppm default assumption used by EPA.

- Tier 3 uses actual NMOC concentrations for the site (based on sampling as in Tier 2), and site-specific gas generation characteristics (based on a pump test).

What this means is that many landfills that "fail" Tier 1 (and thus would be subject to NSPS) would "pass" under Tier 2 or Tier 3 testing (and thus not be subject to NSPS). Landfills that already had GCCS installed at their landfills in the mid-1990s were tempted to forego the small expense of conducting Tier 2 testing, for example, on the theory that since they already had a system installed that they were required to operate under a state permit, so there was no reason to try to escape regulation under NSPS.

However, many landfills that could have but did not perform Tier 2 testing and escape NSPS later realized that the burden of monitoring landfill gas systems and reporting under NSPS is substantial. Some such landfills performed a "late" Tier 2 test, and then approached either EPA or their state to obtain concurrence that NSPS does not apply to their landfill. EPA in some cases has accepted "late" Tier 2 test results (particularly where the testing was not "too late"), and in some cases has rejected them. Similarly, some states have accepted "late" Tier 2 results and incorporated them into a subsequent Title V permit ostensibly not subject to NSPS, and some states have rejected "late" Tier 2 tests.

Where they have been accepted "late," EPA has gone to great pains to say that the landfill will not gain an extension of the ultimate compliance schedule as a result of a "late" Tier 2 test that shows the landfill is over the 50 Mg NMOC threshold, and that other elements of compliance (*e.g.*, GCCS design plan) acts as a space saver for the Tier 2 test.

Some in the industry take the view that it should not matter when a Tier 2 test demonstrates that the landfill does not meet the 50 Mg NMOC threshold, and even a facility that already has installed a GCCS should be allowed as a policy matter to avoid the burden of operating the system pursuant to NSPS requirements if it clearly does not emit 50 Mg/year of NMOCs, no matter when that fact is uncovered.

GCCS Design Plans

Under the Design Plan requirements, a gas collection system must cover all areas of a landfill that are 2 years or older if closed to solid waste receipt, or 5 years or older if still active. These ages apply to waste appearing at any depth in a given area. For example, if the active working face rests atop trash that is 5 years old or older at depth, a gas system must be installed in this location, even if the shallower refuse is (obviously) much younger.

The above age criteria are used to delineate the portions of the landfill that must receive initial coverage from LFG collection. In addition, NSPS requires that an existing NSPS-compliant gas system regularly be expanded to accommodate on-going expansion of the landfill, as old cells are closed, or as active areas have refuse somewhere in the vertical column that passes 5 years in age.

There have been a number of points of discussion between EPA and the regulated community regarding the scope of GCCS system design and construction. For example, the GCCS is required to extend over the portion of the landfill site that contains waste. It is not required to extend to appurtenant structures outside the waste footprint (*e.g.*, a leachate collection tank outside the waste boundary that produces its own gas), unless these appurtenant structures convey landfill gas from an area requiring control.

Fundamentally, NSPS requires certain performance criteria to be met by the GCCS, including landfill surface emission monitoring (SEM) and GCCS wellhead monitoring. Any GCCS design that can achieve these performance criteria should be acceptable –

there is no requirement in the rule for specific numbers of extraction wells, blowers, etc.

System Monitoring and Reporting

SEM. NSPS requires that quarterly SEM be conducted over all portions of landfills that are to be NSPS-compliant (*i.e.*, areas containing wastes that meet the 2-year and 5-year rules discussed earlier), and that emissions from these areas be below 500 ppm methane. Testing is to be conducted with a hand-held gas monitoring device such as an organic vapor analyzer (OVA) or a flame ionization detector (FID). A monitoring technician is to hold this device with its inlet wand at an elevation of 5 to 10 cm above the ground surface. The technician is then to walk over the eligible area, in straight lines arranged in a serpentine fashion to provide complete landfill surface coverage. Lines in the serpentine pattern are to be placed 30 meters (100 feet) apart.

If a crack in the cover, distressed vegetation or other visual indication of a release of landfill gas is observed, the 30-meter serpentine pattern is to be supplemented with SEM measurements at the crack or distressed vegetation. However, SEM should not be required for appurtenant structures located outside the waste footprint.

Any exceedances of the 500 ppm standard are to be carefully marked in the field so they can be remediated. Remediation can involve well field adjustment, cover compaction, adding additional cover thickness or even just wetting the cover. After these actions are taken, all marked exceedances are to be re-tested within 10 days. If some locations fail again, another round of remediation and re-test is allowed 10 days after that. Eventually, compliance with the 500 ppm methane standard is usually achieved, and the remediation and 10-day re-testing is completed. One additional round is then required 30 days after the last exceedance for the remediated area, and if it passes again, then the quarterly round has been successfully completed.

If surface emission testing continues to fail at one or more locations, more drastic remediation is required. A physical upgrade to the LFG collection system must be performed within 120 days.

Wellhead Monitoring. Monthly monitoring for oxygen or nitrogen, temperature and pressure is required at each wellhead of the GCCS system. These parameters are useful in determining if a given well is under vacuum (a requirement), and if so whether there is too much vacuum on the well (which can lead to a subsurface fire). Too much oxygen (over 5 percent) or nitrogen (over 20 percent) indicates that air (as opposed to landfill gas) is being drawn into the well. Too much temperature (over 55 degrees Celsius) might indicate there is a subsurface fire near the well.

Under NSPS, if an exceedance of gas composition targets, temperature targets or pressure targets occur at any given well during any given round, the gas system owner/operator is given the opportunity to correct the situation. Alternatively, if it is believed that gas compositions and targets in excess of the value specified above are acceptable, and do not indicate an over-withdrawal of collected landfill gas or support of a subsurface fire, higher values are allowed on an ongoing basis. To achieve the acceptability of such higher values, a specific report must be submitted known as a "Higher Operating Value Demonstration."

Control System Monitoring. NSPS requires the control system (*e.g.*, blower and flare) to be monitored essentially on a continuous basis. The best way to accomplish this is the installation of strip chart recorders or electronic data recorders that track blower flow rate and flare combustion temperature.

NSPS specifically allow either utility flares or enclosed flares, calling both Best Demonstrated Technology (BDT). It should be noted that the use of enclosed flares physically allows the collection of post-combustion gas samples.

Such testing is required under NSPS, and local air regulators may add more testing requirements to the federal tests. Utility flares can not be physically sampled for post-combustion gas samples, and testing of such gases is therefore not required by NSPS. For enclosed flares, NSPS requires that the flare be operated at near the temperature used for any demonstration stack test, while there is no corresponding requirement for utility flares. Thus, where they are allowed, utility flares are easier to monitor and simpler to use for NSPS control purposes.

Start-up, Shut-down and Malfunction (SSM). NSPS provides that gas collection systems need not be operated in the event of SSM events, provided that SSM events may not last longer than 5 days for collection systems. In the event of a SSM incident involving a treatment or control device, then the gas collection system must be shut off within one hour, in order to limit the quantity of landfill gas vented to the atmosphere. In either event, the GCCS must be re-started within the five-day period caused by the SSM, or the landfill is out of compliance.

Compliance Reports. Periodic compliance reports are required under NSPS, to include certification of compliance together with any exceptions such as SEM exceedances, well head monitoring deviations, or control system monitoring problems and corrective measures taken.

Compliance Suggestions

Experience has shown that monitoring under NSPS can be difficult under some conditions, and that landfills seldom will "pass" in all locations during a quarterly or monthly monitoring round. A few practical suggestions:

- NSPS allow you to exclude from SEM testing all steep slopes and other "dangerous areas." Take advantage of this provision, and conduct testing where it is safe to do so. Interestingly, the NSPS rules do not explicitly exclude the active working face from SEM. Define the active working face as a dangerous area (it typically is), and exclude it from surface emission testing.

- As written, NSPS say that SEM testing should only be performed in typical weather conditions. Exclude times of heavy rain or unseasonably high winds. Also, a round in January may find your landfill covered with 2 feet of snow and ice. Some states have recognized the folly of surface emission monitoring in winter (when these conditions can be found). Minnesota (for example) has deleted the requirement for a winter round altogether, and requires only 3 annual testing rounds. Fortunately, a snow- and ice-covered landfill is unlikely to exceed the 500 ppm methane. Consider deleting the round at your own initiative if these conditions create "dangerous areas" atop the whole site.

- Most failures recorded at landfills come from leaks around well heads, and from obvious cracks in the surface cover. Visually observe the apparent cause of an exceedance, and plan remediation accordingly. Usually a landfill cover crack can be easily remediated with soil compaction, soil wetting, and/or additional cover soil application. Cracks around well heads can be remediated in a similar fashion, or by applying an apron around the well head and atop adjacent soil.

Conclusion

NSPS for MSW landfills have been in place for more than eight years. Recent enforcement actions by EPA and state agencies have uncovered a number of compliance problems, as well as areas in which the NSPS are unclear. Owners and operators of active and closed MSW landfills would be wise to review their landfill gas control practices in light of the

lessons learned following early enforcement activities.

Mike McLaughlin is an attorney and engineer at SCS Engineering in Reston, Virginia. He is a senior vice president for the firm's Environmental Services Practice. He serves as vice chair of the ABA Section of Environment, Energy, and Resources' Waste Management Committee and as its resident "Techie."

IT'S DIRTY WORK: SOLID WASTE LEGISLATION IN MICHIGAN

Arthur H. Siegal

In response to significant political pressure, in March, 2004, Michigan enacted eleven bills – the "solid waste control package." These bills effectively close Michigan's borders to out-of-state waste.

Despite the high public and political profile of these concerns, studies indicate that there was no basis for concerns. A 2003 report found that, of more than 4,600 garbage loads inspected, only 18 (less than one half of one percent) contained any garbage prohibited from landfilling in Michigan, such as appliances or truck batteries. The vast majority of the offending loads were from Michigan and Indiana – not Canada. However, the percentage of waste landfilled in Michigan originating in Canada has been increasing, particularly after Toronto's landfills closed. This has caused a bi-partisan firestorm of support for efforts to halt the influx of waste.

The acts require that the Michigan Department of Environmental Quality (MDEQ) create an approved list of jurisdictions from which waste can come into Michigan if those jurisdictions bar the disposal of the same wastes as Michigan. Landfill owners are barred from accepting solid waste generated outside of Michigan unless the jurisdiction is on the MDEQ's approved list, the waste was processed through a disposal facility which documents the removal of prohibited items or the waste is composed of uniform material and meets Michigan's disposal requirements.

The acts prohibit landfill disposal of beverage containers, whole tires, yard clippings, used oil, lead acid batteries, low-level radioactive waste, hazardous or liquid waste, sewage, PCBs and asbestos waste (in certain circumstances), in addition to medical waste, which was previously banned.

The remainder of the legislation provides definitions, authorizes the MDEQ to halt waste disposal that poses a threat, imposes a 2-year moratorium on new landfill construction permits, strengthened landfill reporting on sources of waste received, increased fines for violations and enhanced landfill inspections.

This package has been challenged by the National Solid Waste Management Association which filed a lawsuit in the Eastern District of Michigan on April 5, 2004, Case No. 04-71271, arguing that, taken together, *inter alia*, they violate the dormant Commerce Clause, the foreign Commerce Clause, and the foreign affairs power. NSWMA argues that the new laws are discriminatory and that the purpose behind the new laws and their effect violates NSWMA's constitutional rights.

The Commerce Clause of the U.S. Constitution empowers Congress to "regulate commerce with foreign nations, and among the several states." Courts have held the Clause implicitly restrains states from discriminating against, or imposing substantial burdens upon, interstate or foreign commerce. This limitation on a state's power to burden interstate commerce is known as the negative or "dormant" Commerce Clause. It is well-settled that solid waste and solid waste disposal services are protected commerce. *Fort Gratiot Sanitary Landfill, Inc v.*

Kozlov, Leonard

From: Ron Beladi [rbeladi@neel-schaffer.com]
Sent: Tuesday, October 12, 2004 2:51 PM
To: Kozlov, Leonard
Subject: FW: Meeting with Orange County-Oct 13

-----Original Message-----
From: Ron Beladi [mailto:rbeladi@neel-schaffer.com]
Sent: Tuesday, October 12, 2004 2:44 PM
To: Len Koslov (leonard.koslov@dep.state.fl.us)
Cc: James W Flynt Jr. (James.Flynt@co.orange.fl.us); Bo Bruner (bbruner@CH2M.com); 'rbeladi@neel-schaffer.com'
Subject: Meeting with Orange County-Oct 13

Len;

Attached please find an agenda for our meeting tomorrow. We would like to keep this meeting informal and have general discussion about where we are with the new landfill construction and plans for the operations. I am also attaching an opinion paper by the general council for the National solid waste association. Please note top of page 7 under the heading of Gas Controls and Collection System (GCCS). This is one of the topics in the T-V permit for discussion. See you tomorrow.

Regards

Ron S. Beladi, P.E.
Vice-President
Director of Solid Waste Services
WCG|Neel-Schaffer, Inc.
2600 Lake Lucien Drive
Maitland, Florida 32751
Phone: (407) 647-6623
Fax: (407) 539-0575
rbeladi@neel-schaffer.com

Surface level emissions - when using the VRS collection

Flare reports - portable flare

Response

180 days - modified by the permit after operation

candlestick flare ??

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

TOM DA 2-23-05
FYI

4APT-ATMB

FEB 09 2005

L. T. Kozlov, P.E.
Program Administrator
Air Resources Management
Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RECEIVED
FEB 16 2005
Central Dist. - DEP

Dear Mr. Kozlov:

The purpose of this letter is to provide you with a written determination regarding proposed changes to the standard operating procedures for landfill gas extraction wells at the Orange County Solid Waste Management Facility. This landfill is subject to 40 CFR Part 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), and in a request sent to the U.S. Environmental Protection Agency (EPA) Region 4 and to your agency, Orange County proposed changes in standard operating procedures for certain wells in the landfill's active gas collection system. These changes involve an alternative to decommissioning wells where low landfill gas generation rates make it difficult to simultaneously operate wellheads at negative pressure and maintain compliance with oxygen concentration limits. Based upon our review, the changes proposed by Orange County are acceptable. Details regarding the County's proposal and the basis for our conclusions are provided in the remainder of this letter.

Operating requirements for gas collection and control systems (GCCS) are promulgated at 40 CFR §60.753(b), (c), and (d). Under these provisions, wellheads must be operated under negative pressure, the temperature of interior wellheads must be less than 55 °C, gas quality limits for interior wells (either less than 20 percent nitrogen or less than five percent oxygen) must be met, and the methane concentration at the surface of the landfill must be less than 500 parts per million (ppm). Under provisions in 40 CFR §60.755, monitoring to verify compliance with the wellhead pressure, temperature, and gas quality limits must be conducted on a monthly basis. Monitoring to verify compliance with the 500 ppm surface methane concentration limit must be conducted on a quarterly basis.

Orange County's request for approval of changes to its standard operating procedures involves wells where gas flow rates are so low that applying even minimal vacuum results in air infiltration that causes exceedances of the applicable oxygen concentration limit. Shutting such wells down will prevent the air filtration that leads to the oxygen exceedances, but shutting a well down is likely to cause positive pressure in the wellhead as landfill gas builds up. Therefore, simultaneously complying with both

the negative pressure and oxygen concentration limits in 40 CFR §60.753 can be difficult for wells where gas flow rates have declined over time.

Under provisions in 40 CFR §60.753(b)(3), wells that experience positive pressure after being shutdown to accommodate declining landfill gas flow rates can be decommissioned if permission is granted by the Administrator. As an alternative to decommissioning wells under the provisions, Orange County has proposed to make the following changes to its standard operating procedure for wells where persistent oxygen exceedances are not the result of operations and/or maintenance issues:

1. Wells where oxygen concentrations do not decline to acceptable levels after more than one hour of reduced vacuum will be shut off until the gas quality recovers.

2. The monthly monitoring required by 40 CFR §60.755 will be conducted for wells that have been shutdown, but positive pressure or elevated oxygen concentrations will not be considered exceedances of the operating limits in 40 CFR §60.753.

3. If monthly monitoring indicates that pressure has built up in the well and the oxygen concentration still exceeds five percent, the well will be opened to relieve the pressure and will be shutdown until it is monitored the following month.

4. If the monthly monitoring indicates that gas quality has improved (i.e., the oxygen concentration has dropped below five percent), the well will be brought back on line until the gas quality declines again.

5. The quarterly methane surface concentration monitoring required under 40 CFR §60.755 will be conducted for wells that have been shutdown. Standard remediation steps, including evaluating the need to return wells to full-time service, will be followed if exceedances of the 500 ppm methane surface concentration limit are detected.

According to Mr. Daniel Morical of Orange County Utilities, the operating procedure changes outlined above would apply to approximately four or five of the 130 wells at its landfill at any one time. Mr. Morical also indicated that there is a high probability of gas quality improving to the point it would be necessary to restart wells that had been shutdown. Based upon our review, the proposed changes to Orange County's standard operating procedures are acceptable because shutting down nonproductive wells, instead of decommissioning them, has the potential to lower overall nonmethane organic compound (NMOC) emissions at the landfill. This potential increase in NMOC control system efficiency stems from the ability to quickly resume gas collection if there are improvements in the gas quality or increases in the gas production rate in an area of the landfill where wells have become nonproductive. If wells in a nonproductive area are decommissioned, instead of merely being shutdown, NMOC

emissions would not be controlled between the time an exceedance is identified and a new well is installed. One condition for approval of the proposed changes in standard operating procedures at the Orange County Solid Waste Management Facility is that facility diagrams must be updated to indicate which wells have been shutdown because landfill gas production rates are too low to permit continuous extraction.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides and Toxics
Management Division

cc: Daniel Morical
Orange County Utilities – Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUNTY UTILITIES - SOLID WASTE DIVISION
5901 Young Pine Road ▪ Orlando, Florida 32829
407-836-6600 ▪ Fax 407-836-6629

February 25, 2005

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803

Subject: 2004 Annual Statement of Compliance for Title V Source,
Orange County Solid Waste Management Facility
Orange County, Florida
Title V Permit Number: 0950113-003-AV

To Whom It May Concern:

Please find enclosed the 2004 Statement of Compliance for a Title V Source for the Orange County Solid Waste Management Facility (ID No. 0950113). Please call Dan Morrical at 407-856-6654 or me at 407-254-9660 if you have any questions about this submittal.

Sincerely,

James W. Becker
Manager

c: EPA, Region IV, Air, Pesticides, & Toxic Management Division
Dan Morrical, P.E., Chief Engineer, Orange County Solid Waste Division
James Nissen, P.E., Brown and Caldwell
David Penoyer, P.E., SCS Engineers, Inc.
Rick DiGia, P.E., DTE Biomass Energy, Inc.

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

X **Annual Requirement**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
January through December of 2004 (year)	March 1, 2005

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Orange County Board of County Commissioners

Site Name: Orange County Solid Waste Management Facility Facility ID No. 0950113 County: Orange

COMPLIANCE STATEMENT (Check only one of the following three options)

____ **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

____ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

__X__ **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

James W Becker — Feb. 24, 2005

(Signature of Title V Source Responsible Official) *(Date)*

Name: James W. Becker Title: Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

N/A

(Signature of Acid Rain Source Designated Representative) *(Date)*

Name: Title:

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Noncompliance Items:

1. Startup, Shutdown, or Malfunction Event in July 2004

   A. Emission Unit Identification: 001

   B. Specific Permit Condition Number: Section III, Subsection A [40 CFR 60.757(f)(4)].

   C. Description of the Requirement of the Permit Condition: In accordance with 40 CFR 60.757(f)(4), the flare must be operational at all times, and periods when the collection system is not operational for a period in excess of 5 days must be reported to the FDEP. This shutdown event was greater than five days, and was reported to the FDEP in a letter dated July 14, 2004. A copy of the letter is included with this form.

   D. Basis of Determination of Noncompliance: Flare was non-operative due to loss of power.

   E. Beginning and Ending Dates of Noncompliance Event: July 6, 2004 at 6:00 pm to July 12, 2004 at 2:00 pm.

   F. Probable Cause and Corrective Action: **Probable Cause:** The power to the flare went out when lightning hit a power pole and blew the fuses at approximately 6:00 p.m. on July 6, 2004. Orlando Utilities Commission replaced the blown fuses and the flare was restarted at 2:00 p.m. on July 12, 2004. The outage was not discovered immediately because the warning light and the autodialer were inoperable without power. **Corrective Action:** The flare is now checked and a checklist form is completed every work day (not weekends or holidays). In addition, employees visually observe the smokestack at various times of the day to confirm that the flare is operational. Also, backup batteries have been installed to allow the warning light and autodialer to continue to operate when power in not available (see attached confirmation letter from SCS Engineers). The County is currently in negotiation with the Department regarding a Consent Order, including $4,000 in civil penalties and $300 for costs and expenses incurred by the Department for this event.

   G. Dates of Reports Submitted Identifying this Incident of Noncompliance: The attached notification letter, dated July 14, 2004, was submitted to the Department describing the circumstances surrounding the flare outage.

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUN UTILITIES - SOLID WASTE D SION
5901 Young Pine Road • Orlando, Florida 32829
407-836-6600 • Fax 407-836-6629

July 14, 2004
File No. 09199036.16

FILE COPY

Mr. Thomas Mulligan
Florida Department of Environmental Protection
3319 Maguire Boulevard , Suite 232
Orlando, Florida 32803-3767

Subject: Notice of Startup, Shutdown, or Malfunction Event
Class III and Pre-1985 Landfill Gas Collection and Control System
Orange County Solid Waste Management Facility, Orange County, Florida
Permit No. 0950113-002-AV

Dear Mr. Mulligan:

This letter is to inform you of a recent malfunction of the landfill gas collection and control system (GCCS) for the Class III and Pre-1985 landfills at the Orange County Solid Waste Management Facility. As you know, the landfill is subject to both the New Source Performance Standards (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Under NESHAP, Orange County is required to have a Startup, Shutdown, and Malfunction (SSM) Plan for the GCCSs operated on site. As part of the SSM Plan, and as required by the NESHAP, if actions taken during a SSM event are not consistent with the SSM Plan, the County is required to notify the Florida Department of Environmental Protection (FDEP) in writing within 7 days of commencing such actions.

On July 6, 2004, at approximately 6:00 p.m., a power outage resulted in the shutdown of the GCCS, when two fuses were blown on the power pole servicing the blower/flare station. No other facilities on site were affected. As you know, per the NSPS (40 CFR 60.757(f)(4)), the GCCS cannot be offline for more than five days. Because the fuses on the power pole were not repaired and the system not restarted until 2:00 p.m. on July 12, 2004, the GCCS was offline for more than the allowable five days. Therefore, the County considers this to be a deviation from the SSM Plan.

The County has taken immediate steps to ensure that this situation does not occur again in the future. The County is investigating why the autodialer did not properly notify site personnel of the downtime, and is preparing to install a battery back-up to ensure that the autodialer remains functional in case of future outages. Modifications to the warning lights may also be implemented. Site personnel will be trained to make more thorough, routine checks of the system to confirm proper operation daily.

The County will also update the current SSM Plan, which is dated January 16, 2004, to address this situation in case of a future similar malfunction due to power failure. The revised SSM Plan will be submitted to FDEP with the next semi-annual SSM/NSPS report.

Please find the attached copies of the malfunction report form and SSM departure report form.

Please call Dan Morrical, P.E., at (407) 836-6654 if you have any questions or need additional information.

Sincerely,

James W. Becker
Manager

c: Dan Morrical, P.E., Chief Engineer, Orange County Solid Waste Division
David Penoyer, P.E., SCS Engineers
Mike Rogers, P.G., Environmental Specialist, Orange County Solid Waste Division

Startup/Shutdown/Malfunction Report Form

Section 1 - All Events

List effected piece(s) of equipment: Power Outage, OVC

Type of Event	Military Time Date/Time Start	Date/Time End	Duration (hours)	Event Code (see back of form)	SOP* Followed? Yes	No**
☐ Startup						
☐ Shutdown						
☒ Malfunction	7/6/04 9:00PM	7/13/04 2:00PM	161	16	Complete Section 2 Below	

Date Form Filled Out: 7/13/04 Signature:

* Standard Operating Procedure (SOP) for Flare Startups (Manual & Automatic) and Shutdowns are provided in SSM Plan
**If SOP in SSM Plan was not followed, notify site engineer immediately.

Section 2 - Malfunction Events Only

Step	Corrective Action Procedures for All Malfunctions	P Check one of the following for each step: Procedure completed	Procedure Not Applicable
1.	Determine if landfill gas is being released to the air (can you smell landfill gas, or measure/detect gas flow?).	☒	
2.	If landfill gas is being released to the air, notify personnel on "Contact List".	☐	☒
3.	Determine if the malfunction is causing an unsafe operating condition (air entering landfill or piping, smoking, vibration, or other problem), which may harm people, the environment or the landfill gas control equipment.	☒	
4.	If unsafe operating condition exists, or landfill gas is being released to the air, stop (if possible) landfill gas flow.	☐	☒
5.	If Control device or other system component is shutdown due to Step 4, follow Shutdown SOP and Complete Section 1 - "Shutdown".	☐	☒
6.	Detemine if other personnel/resource (qualified technician, electrician, consultant or other) are needed for malfunction diagnosis.	☒	
7.	If additional personnel needed, notify qualified personnel: a. Record contact name, date and time: OVC, 7/13/04 b. Contact site representative with information recorded in #7.a.	☒	☐
8.	Start malfunction diagnosis.	☒	
9.	Determine if other resources are needed to fix the malfunction (qualified technician, electrician, contractor, on-site resources, manufacturer's representative, or other).	☒	
10.	If additional resources needed, contact qualified resource: a. Record contact name, date and time: b. Contact site representative with information recorded in #10.a.	☐	☒
11.	Fix the malfunction.	☒	
12.	Once the malfunction is fixed, re-start the system per SOP if it had been shut down, and record start-up times and dates on this form.	☒	☐
13.	Record date that malfunction occurred, date that malfunction was repaired, and total time that system was out of service in boxes in Section 1 of this form.	☒	
14.	Sign this form, copy it, and place it in the Start-up, Shutdown, Malfunction file.	☒	
15.	If the procedures listed above were not followed, contact the site engineer immediately.	☐	☒

Best Available Copy

SSM PLAN DEPARTURE REPORT FORM
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

1. Type of Event: ☐ Startup ☐ Shutdown ☒ Malfunction

2. Date: 7/6/04 – 7/13/04 Time: 9:00PM / 2:00PM Duration: 161 hours

3. Provide detailed explanation of the circumstances of the startup, shutdown, or malfunction:*

Power outage was caused by blown fuses in Orlando Utilities Commission transformer in electrical line that provided power to the flare.

4. Provide description of corrective actions taken:*

Standard Operating Procedure for malfunction event was followed.

5. Describe the reasons the SSM Plan was not followed:*

Malfunction repair exceeded five days.

6. Describe any proposed revisions to the SSM Plan:*

The County will update the current SSM Plan to address the situation in case of future similar malfunction due to power failure. A battery back-up to ensure that the auto dialer remains functional in case of future outages will be installed.

7. Name (print): Adam Baughman

8. Title Staff Professional

*Use additional sheets if necessary.

Note: If the event documented in this form was a malfunction and if the SSM plan needs to be revised to address the particular type of malfunction that occurred, the revision of the SSM plan must be made within 45 days of the event.

7003 2260 0001 6761 1996

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$ .60
Certified Fee	2.30
Return Reciept Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 4.65

Postmark Here

Sent To: Thomas Mulligan - FDEP
Street, Apt. No.; or PO Box No.: 3319 Maguire Blvd Suite 232
City, State, ZIP+4: Orlando, FL 32803-3767

PS Form 3800, June 2002 — See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Thomas Mulligan
Florida Dept. of Environmental Protection
3319 Maguire Boulevard, Ste. 232
Orlando, FL 32803-3767

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name): SPIRO — C. Date of Delivery: 9/16/04

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7003 2260 0001 6761 1996

PS Form 3811, February 2004 — Domestic Return Receipt — 102595-02-M-1540

Environmental Consultants

3012 U.S. Highway 301 N
Suite 700
Tampa, FL 33619-2242

813 621-0080
FAX 813 623-6757

SCS ENGINEERS

February 17, 2005
File No. 09199036.17

SWD '05FEB21 AM10:18

Mr. Dan Morrical, P.E.
Orange County Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

Subject: Installation of Battery Backup for Flare Station Controls
Pre-1985 and Class III Landfill Gas Collection and Control System
Orange County Solid Waste Management Facility, Orange County, Florida

Dear Dan:

This letter is to inform you that two battery backups have been installed at the flare station control panel for the Pre-1985 and Class III landfills at the Orange County Solid Waste Management Facility. The first battery backup unit provides power to the CPU, autodialer, and modem so that these instruments will be able to notify County personnel of any system downtime, even if power is lost at the flare station.

In addition, SCS Field Services (SCS-FS) has installed a second warning light atop the control panel, which is connected to a separate battery backup unit. This warning light illuminates whenever power is shut off at the control panel. As you know, a warning light was already in place at the control panel. However, SCS-FS installed the new light because it consumes less power than the existing light, which should allow the battery backup to power it longer than if the existing light was used.

Please call us if you have any questions or need additional information.

Sincerely,

David H. Penoyer, P.E.
Project Manager

Raymond J. Dever, P.E., DEE
Vice President
SCS ENGINEERS

Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, FL 32399-9958

For any questions, call Ms. Andrea Vaughn in OIG. Andrea can only answer questions concerning the questionnaire, not the permit. Her telephone number is (850) 488-2287.

Agner, Tracy

From: Agner, Tracy
Sent: Wednesday, February 11, 2004 3:22 PM
To: 'sgaze@co.volusia.fl.us'
Cc: Agner, Tracy
Subject: your info request

Importance: High

February 11, 2004

Dear Susan,

Here is the information that you requested:

Orange Co
_andfill-Final Notic...

http://www.dep.state.fl.us/air/permitting.htm

Take care.

Tracy

Your message

To:	'sgaze@co.volusia.fl.us'
Cc:	Agner, Tracy
Subject:	your info request
Sent:	2/11/2004 3:22 PM

was delivered to the following recipient(s):

Agner, Tracy on 2/11/2004 3:22 PM

RECEIVED
JUL 16 2003
Central Dist. - DEP

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

E-CORRESPONDENCE
jim.becker@ocfl.net

James W. Becker, Division Manager
Orange County Solid Waste Division
Orange County Board of County Commissioners
5901 Young Pine Road
Orlando, Florida 32829

Re: Applicable Requirements
Orange County Solid Waste Division – Orange County Solid Waste Management Facility
DEP File Number: 0950113-003

Dear Mr. Becker:

The facility's renewed Title V Permit for the Orange County Solid Waste Management Facility was issued/effective on October 10, 2002. On January 16, 2003, the regulations at 40 CFR Part 63, Subpart AAAA, National Emission Standards For Hazardous Air Pollutants: Municipal Solid Waste Landfills became applicable to your facility. The Department is required to open your Title V Permit for cause and install these requirements in accordance with Rules 62-4.080(1) and 62-213.430(4), F.A.C., and 40 CFR 70.7(f). The Department will incorporate the specific applicable requirements of 40 CFR Part 63, Subparts A and AAAA into your Title V Permit.

If there are any questions, please give Alan Zahm, P.E., a call at (407) 893-3335.

Sincerely,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Date: 7-2-03

LTK/dl
DCC

cc: David M. Pelham, P. E., (*dpelham@wcg1.com*)
Scott Sheplak, DARM/BAR (INTERNET E-mail Memorandum)
Gracy Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

September 16, 1997

CERTIFIED MAIL
P 248 041 761

Mr. Mike Chandler
Solid Waste Department - Acting Manager
Orange County Solid Waste Facility
Post Office Box 720067
Orlando Florida 32872-0067

Re: Request for Additional Information Regarding Initial Title V Permit Application
File No. 0950113-001-AV
Orange County Landfill, Orange County

Dear Mr. Chandler:

Your initial Title V permit application for the Orange County Landfill was "timely and complete" for purposes of the initial Title V application submission (see Rule 62-213.420(1)(a)1. and (b)2., F.A.C.).

However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-213.420(1)(b)3., F.A.C., and Rule 62-4.070(1), F.A.C. The additional information requested is organized by topic.

1. The application must be signed by a responsible official as defined in 62-210.200(241)(c) as either a principal executive officer or ranking elected official responsible for the overall operation of the facility. Please complete and submit a new R.O. certification statement page from the new long application form, DEP Form No. 62-210.900, effective March 21, 1996 (enclosed).

2. If the original application was generated using ELSA software please submit an ELSA Disk along with the hard copy application.

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) request additional time under Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please call Scott Wesson at 407/893-3333.

Sincerely,

Alan Zahm

Alan D. Zahm, P.E.
Supervisor, Permitting
Air Resources Management

17 Sep '97
DATE

LTK/sw

Enclosures

copy to:
Mehran S. Beladi, P.E.
Orange County Environmental Protection Derpartment

CH2M/G&R
The Joint Venture
225 East Robinson Street □Suite 405 □Orlando, Florida 32801 □(407)423-0030 FAX (407)839-5901

AZ-351

September 26, 1997

Mr. Alan D. Zahm, P.E.
Supervisor, Permitting
Air Resources Management
Central District
Florida Department of Environmental Protection (FDEP)
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

RE: ***Initial Title V Permit Application***
Orange County Solid Waste Management Facility
FDEP File No. 0950113-001-AV

Dear Mr. Zahm:

This letter is in response to your September 16, 1997 correspondence to Orange County Solid Waste Management Department requesting additional information regarding the above mentioned permit application.

1. The required new R.O. certification statement is completed by Mr. Michael Chandler, manager of the Orange County Solid Waste Department, and submitted along with this letter response. Orange County had previously submitted a letter to the FDEP-Central District, designating Mr. Michael Chandler as the R.O. and representative of the Orange County Board of County Commissioners, for permit applications and other matters relating to the County's solid waste management facilities. A copy of this letter will be mailed to the Air Resources Management Section under separate cover.

DEP – Solid Waste section

2. An electronic file of the Title V Permit Application in ELSA format (four computer diskettes) is enclosed with this letter response.

3. A revised "Exhibit G" of the application showing the Summary of Emissions Calculations for the Orange County Solid Waste Facility is also enclosed. This revised exhibit shows the VOC concentration (in ppmv) as an average of the six samples that were analyzed by the laboratory. The VOC concentration shown in Exhibit-G of the original application did not represent the average concentration and was in error. The related input data in the enclosed electronic file was modified to reflect this revision. Copies of the laboratory results were submitted with the original application.

The County expects to complete the conversion of the existing passive landfill gas system to an active landfill gas collection system with utilization at OUC's Curtis Stanton Power Plant by the end of the third quarter of FY- 98. Upon completion of this conversion project, the County will schedule a meeting with your office for modification of the Facility's Air Permit requirements.

Should you have any questions or require additional information, please advise.

Sincerely,

CH2M/G&R- Joint Venture

Mehran S. Beladi, P.E.
Project Manager

Enclosures

CC: Mr. Michael Chandler, Manager, Solid Waste Department
Mr. Willie Smith, Engineer, Utilities Division
Mr. Erik Melear, Solid Waste Department Engineer
Mr. Bo Bruner, CH2M/G&R

c:/data/rb/zahm.doc

Scope of

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

   Michael L. Chandler, Manager, Solid Waste Department

2. Owner/Authorized Representative or Responsible Official Mailing Address:

   Organization/Firm: **Orange County Solid Waste Department**
   Street Address: **P.O. Box 720067, 5901 Young Pine Road**
   City: **Orlando** State: **Florida** Zip Code: **32872-0067**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (**407**) **836-6600** Fax: (**407**) **836-6629**

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

M. L. Chandler — Signature

9/23/97 — Date

* Attach letter of authorization if not currently on file.

EXHIBIT G (REVISED)
SUMMARY OF EMISSIONS CALCULATIONS
ORANGE COUNTY SOLID WASTE MANAGEMENT FACILITY

Analyte	Avg. Conc.* (ppbv)	MW	Avg. Conc.* ug/m^3	Year-1996 Mass Emission Rate (lb/yr)	Year-2002 Mass Emission Rate (lb/yr)	Year-1996 Mass Emission Rate (Mg/yr	Year-2002 Mass Emission Rate (Mg/yr)
I. Controlled Landfills							
VOC (ppmv)**	**1,624**	**12**	**870,000**	**74,600** 37.3 TPY	**167,700** 83.85 TPY	**33.87**	**76.13**
2-Butanone	7,650	7,206	22,932	4,091	5,372	1.85	2.43
Methyl Isobutyl Ketoner	1,209	100	5,028	897	1,178	0.41	0.53
Methanol	7,042	32	9,383	1,674	2,198	0.76	1.00
Vinyl chloride	384	63	999	178	234	0.08	0.11
Methylene chloride	200	85	706	126	165	0.06	0.07
Chloroform	157	119	778	139	182	0.06	0.08
Carbon tetrachloride	157	154	1,002	179	235	0.08	0.11
Benzene	272	78	883	158	207	0.07	0.09
cis-1,3-Dichloropropene	157	111	723	129	169	0.06	0.08
Toluene	9,033	92	34,629	6,178	8,112	2.8	3.67
trans-1,3-Dichloropropene	157	111	723	129	169	0.06	0.08
1,1,2-Trichloroethane	157	133	869	155	204	0.07	0.09
Chlorobenzene	151	113	706	126	165	0.06	0.07
Ethylbenzene	5,115	106	22,591	4,030	5,292	1.83	2.4
m,p-Xylene	7,912	107	35,207	6,281	8,247	2.85	3.74
o-Xylene	2,730	106	12,058	2,151	2,824	0.97	1.28
Styrene	157	104	678	121	159	0.05	0.07
1,1,2,2-Tetrachloroethane	157	168	1,093	195	256	0.09	0.12
1,4-Dichlorobenzene	750	147	4,587	818	1,075	0.37	0.49
1,2,4-Trichlorobenzene	157	181	1,182	211	277	0.1	0.13
Hexachlorobutadiene	157	258	1,679	300	393	0.14	0.18
Carbonyl sulfide			250	45	58	0.02	0.03
Carbon Disulfide			105	19	25	0.01	0.01
II. Fugitive							
5% of Controlled Landfills				3,730	8,385	1.69	3.81
Sub-Total Fugitive				**3,730**	**8,385**	**1.69**	**3.81**
III. Fuel Tanker							
Sub-Total VOC				**452**	**452**	**0.288**	**0.288**
IV. Unpaved Roads							
Sub-Total PM				**3,581** 1.79 TPY	**3,581** 1.79 TPY	**1.63**	**1.63**
TOTAL MASS EMISSIONS				**82,363**	**180,118**	**37.48**	**81.85**

Notes:
* Average of analysis from 6 vents
** Measured as non-methane organic carbon

Orange County

Public Utilities Division
Alan B. Ispass, P.E., Director
109 East Church Street, Suite 400
Orlando, Florida 32801-3361
Telephone (407) 836-7000
FAX (407) 836-7299

December 5, 1996

Ms. Vivian Garfein, District Director
Florida Department of Environmental Protection
Central Florida District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Re: OPERATIONS PERMIT RENEWAL FOR ORANGE COUNTY LANDFILL (ST 48-127095, SC 48-127432)

Dear Ms. Garfein:

Glace & Radcliff/CH2M Hill has been retained by the Orange County Utilities Division to perform engineering services related to the Operations Permit for the Orange County Landfill. They are authorized to act on behalf of Orange County in reference to this permit application.

This will also provide formal notification that Michael L. Chandler, Manger, Solid Waste Department, is authorized to sign as a representative of the owner on permits and other documents.

Sincerely,

Alan B. Ispass, P.E.
Director

ABI/ldc

perMits ¦ Events ¦ Payment ¦ Facility ¦ partY ¦ Reports ¦ Help ¦ eXit

DDDDDDDDDDDDDDDDDDDDDDDDDDD Permitting Application DDDDDDDDDDDDDDDDDDDDDDDDDDD
ZDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD ARMS Facility DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD?
3 Facility Name: ORANGE COUNTY LANDFILL AIRS ID: 0950113 3
3 County: ORANGE Owner: ORANGE COUNTY PUBLIC UTILITIES 3
3 Office: Cen: ORANGE Category: POINT 3
CDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD Project DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD4
3AIR Permit #: - - Project #: 001 CRA Reference #: 2420 3
3Permit Office: CD Agency Action: Pending 3
3Project Name: LANDFILL Desc: ORANGE COUNTY LANDFILL 3
3Type/Sub/Req: AV /00 Initial Title V Permit Requests Logged: 12-AUG-1996 3
3 Received: ~~09-AUG-1996~~ Issued: Expires: 3
3Fee: 0.00 Realized: 10375.00 Dele: Override: CORRECTION 3
CDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD Related Party DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD4
3Role: APPLICANT Begin: 12-AUG-1996 End: 3
3Name: ORANGE CO PUBLIC UTILITIES SSN/FEID: Unavailable 3
3Addr: 109 E CHURCH ST 3
3City: ORLANDO State: FL Zip: 32801-3318 Country: USA 3
3Phone: 407-836-7000 Fax: 407-836-5379 3
CDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD Processors DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD4
3Processor: ZAHM_A Y Active: 09-AUG-1996 Inactive: 3
@DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDY
Enter Permit Type. Press [LIST] for valid values.
Count: *1 Recieved June 14, 1996 <List><Replace>

Potential Emissions - Facility Wide

VOCs 81.85 Tons/yr

Incomplete 17-Sep-1997
Request Additional Info 17-Sep-1997
Additional Info Recieved 29-Sep-1997

Emission projections recalculated based on VOC concentrations of Actual Emissions from 6 analysed gas vents.

Published 8 Jan 98

1996 - 37.3 TPY
2002 - 83.85 TPY - Peak

Emission Unit 001 1,500 Acre Solid Waste Management Facility
8760 hours per year

E.U. 002 linked 5/15/98!

Per Toli, leave EUs ~~#~~ as permitted. Will not cause a problem for him!

PERMIT DATA FORM

FACILITY NAME: Orange County Solid Waste ID #:

PROJECT NAME: Landfill

DESC:

TYPE CODE: ~~AC~~ AV SUBCODE: ~~1A~~ 00 CHECK IF: GP: ___ EXEMPT:

CORRECT FEE: ~~$1500~~

AMOUNT RECEIVED: ~~10,375.00~~

PROCESSOR: AZ

AMOUNT REFUND: ~~$2875.~~

COMMENTS:

Title V

perMits ¦ Events ¦ Payment ¦ Facility ¦ partY ¦ Reports ¦ Help ¦ eXit

Permitting Application

ARMS Facility

Facility Name: ORANGE COUNTY LANDFILL AIRS ID: 0950113
County: ORANGE Owner: ORANGE COUNTY PUBLIC UTILITIES
Office: Cen: ORANGE AV Category: POINT

Project

AIR Permit #: Project #: 001 CRA Reference #:
Permit Office: CD (DISTRICT) Agency Action: Pending
Project Name: LANDFILL Desc: ORANGE COUNTY LANDFILL
Type/Sub/Req: ~~AC~~ /00 Multiple Sources per Application Logged: 12-AUG-1996
Received: 09-AUG-1996 Issued: Expires:
Fee: ~~7500.00~~ $0 Realized: Dele: Override: CORRECTION

Related Party

Role: APPLICANT Begin: 12-AUG-1996 End:
Name: ORANGE CO PUBLIC UTILITIES SSN/FEID: Unavailable
Addr: 109 E CHURCH ST
City: ORLANDO State: FL Zip: 32801-3318 Country: USA
Phone: 407-836-7000 Fax: 407-836-5379

Processors

Processor: ZAHM_A Y Active: 09-AUG-1996 Inactive:

The current data has been commited to the database.

TITLE V ROUTING CHECKLIST

COMPANY Orange County Solid Waste Department

FACILITY ID 0950113

	DATE	INITIALS
PREDRAFT		
Emailed to Bruce[1]	12/17	SW
DRAFT		
Summary Info Entered	12/31/97	SW
Signed By Kozlov	12-29-97	
Emailed to Terry[2]	12/31/97	
Place in Mail	12/30/97	HS
PROPOSED		
Signed By Kozlov	2-17-98	
Emailed to Terry[2]	2/24/98	SKB
Place in Mail	2/19/98	SKB
FINAL		
Signed By Kozlov	4-15-98	
Emailed to Terry[2]	4/16/98	SW
Place in Mail	4/15/98	MLE

[1] To: BOUTWELL_B cc:KNIGHT_S
[2] To: KNOWLES_T cc:NONE

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUN UTILITIES – SOLID WASTE D. ARTMENT
5901 Young Pine Road ▪ **Reply To:** P.O. Box 720067 ▪ Orlando, Florida 32872-0067
(407) 836-6600 ▪ Fax (407) 836-6629
E-Mail: solidwst@mailhost.magicnet.net

February 9, 1998

Mr. L. T. Kozlov, P.E.
Program Administrator, Air Resources Management
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Re: Orange County Utilities Division, Solid Waste Department:
Title V Air Operation Permit

Dear Mr. Kozlov:

Please find enclosed four copies of the certified legal advertisement in the *Orlando Sentinel* (January 8, 1998) for the Notice of Intent to Issue a Title V Air Operation Permit for the Orange County Solid Waste Management Facility on Young Pine Road.

If you have any questions, or need additional information, please give us a call at 836-6606. Thank you for your assistance in this matter.

Sincerely,

Erik L. Melear

Erik L. Melear, P.E.
Solid Waste Department

ELM/wh

Enclosures-4

c: Scott Wesson, FDEP Central District Office
Michael L. Chandler, Manager, Solid Waste Department
Dan Morrical, P.E., Chief Engineer, Solid Waste Department
Ron Beladi, P.E., CH2M Hill/Glace & Radcliff

File No. 98-002

BEST AVAILABLE COPY

FOR PROPER CREDIT PLEASE ATTACH AND RETURN THIS PORTION WITH YOUR REMITTANCE

1 BILLED ACCOUNT NO:	2 BILLED ACCOUNT:	3 AMOUNT PAID:
071859502	ORANGE COUNTY UTILITIES-SOLI	

4 Sentinel Communications

01/08/98

P.O. BOX 30,000
ORLANDO, FLORIDA 32891-9912
LEGAL ADVERTISING

5 INVOICE NO: 945205001

PLEASE DO NOT FOLD OR STAPLE THIS PORTION

00000000007185950294520500100001748000000000007185950294520500100001748O

NON P.O.
APPROVED
BY

FOR BILLING QUESTIONS-
TOLL-FREE- -800- 435-1232

INVOICE

Kendy John

#410-038-7010-4410 1-12-98

6 DATE	7 REFERENCE NUMBER	8 10 9 11 DESCRIPTION	12 AD SIZE	13 RATE	14 AMOUNT DUE
01/08	WO#4938143O1 INV#945205001	PUBLIC NOTICE OF INTENT LOSL SII01901450 1X LEGL 1 XTRA AFFIDAVI	1X1350 13.50	12.80	172.80 2.00
		AMOUNT DUE			174.80

15 BILLED ACCOUNT:
ORANGE COUNTY UTILITIES-SOLI
P.O. BOX 720067
5901 YOUNG PINE ROAD
ORLANDO FL 328720067

16 BILLED ACCOUNT NO:	17 DATE	18 DOCUMENT NO:
071859502 4078366600	01/08/98	81

19 Sentinel Communications

publisher of
THE ORLANDO SENTINEL
633 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801
LEGAL ADVERTISING

The Orlando Sentinel

Published Daily

$174.80

State of Florida } S.S.
COUNTY OF ORANGE

Before the undersigned authority personally appeared Donna Sha, who or
that he/she is the Legal Advertising Representative of The Orlando Sent
newspaper published at ORLANDO
ORANGE Cou
that the attached copy of advertisement, being a PUBLIC NOTI
in the matter of Permit No. 0950113-002-AV
in the ORANGE
was published in said newspaper in the issue; of 01/08/98

Affiant further says that the said Orlando Sentinel is a newspaper
ORLANDO
ORANGE Cou
and that the said newspaper has heretofore been continuously
said ORANGE Cou
each Week Day and has been entered as second-class mail matte
office in ORLANDO
ORANGE Cou
for a period of one year next preceding the first publication of
copy of advertisement; and affiant further says that he/she has
nor promised any person, firm or corporation any disco
commission or refund for the purpose of securing this adver
publication in the said newspaper.

Donna Shaver

The foregoing instrument was acknowledged before me this 8t
January, 19 98, by Donna Shaver
who is personally known to me and who did take an oath.

(SEAL)

STATE OF FLORIDA NOTARY PUBLIC
JULIA NIC
My Comm
Bonded By:
No. CC530118
Jan.8,1998
[ ] Personally Known [ ] Other I.D.

time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of the person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

The petition shall contain the following information;

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner; if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice.

Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department.

Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding.

Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 29-5.207, Florida Administrative Code.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday except legal holidays, at Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, Florida, telephone 407/893-3328.

The complete project file includes the Draft Permit, the application and the information submitted by the responsible official, exclusive of condifential records under Section 403.111, F.s. Interested persons may contact Alan Zahm P.E., at the above address or call 407/893-3334, for additional information.

Ole1901450 Jan.8,1998

PUBLIC NOTICE OF INTENT
TITLE V AIR OPERATION PERMIT
Florida Department of Environmental Protection
Central District
Title V DRAFT Permit No. : 0950113-002-AV
Orange County Solid Waste FAcility
Orange County

The Florida Department of Environmental Protection , Central District (permitting authority) gives notice of its intent to issue a Title V air operation permit to the Orange County Solid Waste Management FAcility located at 12100 Young Pine Road, Orlando, Orange county, Florida. The facility consists of a municipal solid waste landfill that includes a 58-acre Class I landfill (Cell 7B); a recently constructed 48 - acre Class I landfill (Cell 8), a closed landfill of 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents, a 32-acre Class III landfill; a 39-acre yard waste composting operations a used tire shredding operation; a materials recovery facility; a household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities. The applicant's name and address are: Orange County Solid Waste Deparptment, 5901 Young Pine Road , Orlando, Florida 32872-0067, to the attention of Michael L. Chandler, Manager.

The permitting authority will issue the Title V PROPOSED Permitrr and subsequent Title V FINAL Permit in accordance with the conditions of the enclosed Title V DRAFT Permit unless a response received in accordance with the following results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the permitting authority's office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57, F.S. Mediation under Section 120.573, F.s., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting, decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, Telephone: 850/488-9730, FAx: 850/487-4938. Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of the notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the

TO: Scott Wesson, Central District
FROM: Scott Sheplak
DATE: December 29, 1997

SUBJECT: Pre-draft Title V Permit
Orange County Landfill, 0950113-001-AV

Thank you for submitting your pre-draft. A job well done. My comments are below. Please call if you have any questions.

1. DRAFT permit

a. On Page iii add "Appendix I-1, List of Insignificant Emissions Units and/or Activities" to the list of referenced attachments.

b. Conditions II.5. and 6. move "F.A.C." to the end of the rule citation.

c. Renumber the 2nd condition II.7. to II.8.

d. Recommend inserting the following condition as II.10.:

10. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

2. It appears that you used the landfill models that have been developed.

Another job well done.

0950113.com

Orange County

Orange County Landfill

PERMIT NUMBER:

1210117-002-AV

CERTIFICATION

I **HEREBY CERTIFY** that the engineering features described in the referenced application for a Title V operating permit does provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title ~~17~~ 62. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, chemical, mechanical and structural engineering as well as hydrological, geological and biological features).

Alan Zahm

Alan D. Zahm, P.E.

18 Dec 97
Date

SEAL

STATE OF FLORIDA REGISTERED ENGINEER 0903

TECHNICAL EVALUATION AND DETERMINATION

A. Name and Location of Facility:

Orange County Solid Waste Department
5901 Young Pine Road
Orlando, Florida 32872-0067

B. Description of Facility:

Orange County Solid Waste Management Facility, located on Young Pine Road in southeast Orange County, serves the solid waste needs of the unincorporated areas of the County, and a majority of the incorporated municipalities (all incorporated areas except the cities of Maitland, Winter Park, and a portion of Apopka).

The Orange County Solid Waste Management Facility has a permitted capacity of more than 2.5 Million megagrams and is subject to new source performance standards (NSPS) [40 CFR 60 subpart WWW regulations]. The existing Facility covers approximately 1,500 acres and borders the Orange County Eastern Regional Wastewater Treatment Facility to the north, the Orlando Utilities Commission (OUC) Stanton Power Plant to the east, State Road 528 to the south, and private properties to the west. In anticipation of future solid waste needs of the community, the County has acquired approximately 3,500 acres of adjoining properties for future expansion and further development of the existing 1,500 acre Solid Waste Management Facility

The Facility currently operates: a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8); a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; an household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities. The closed landfills areas consist of: (a) 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents; and (b) The pre-1985 closed fill areas which covers approximately 340-acres. The pre-1985 closed areas of the Landfill were generally filled using the trench method of disposal, and are comparatively lower than the other disposal areas of the site. This has allowed the County to develop Class III landfills in these areas.

C. Processing Schedule:

Date Application Received - June 14, 1996
Date Application Complete - September 29, 1997
Date Permit PROPOSED -

D. Rule Applicability:

40CFR60 Subparts WWW
40CFR61 Subpart A
Title V Core List (see Attached):

E. Emissions Summary:

	lb/hr	tons/yr
Potential VOCs		81.85

Emission Unit ID **Description of Emission Unit**

Emissions Unit ID Number	Emissions Unit Description
001	1,500 acre solid waste management facility

Requested Operating Schedule
The requested maximum operating schedule for the emission unit is 8760 hours/year

PERMIT #: 0950113-001 APPLICANT NAME: Orange County Landfill

TYPE OF PERMIT: AV SUBTYPE: IA

STATUS: _____(IS, DE, GP, EX, WI, RAI) PERMIT PROCESSING (ORR #: [illegible]-CA 01)

OFFICE:

DATE	TIME BEGIN	TIME END	TOTAL TIME (15 MIN)	COMMENTS	POSITION TITLE
ENTERED AUG 09 1996			60		blw
9/17/97				Info. Request copied + mailed	HS
12/30/97				Draft Permit copied + mailed	HS
12/31/97			0.75 hr.	E-mail draft permit pkg to Dallee	AA
2/12-13/98			3.75 hrs	Type p.t. & print PPD pkg (working properly)	AA
2/19/98			2.75 hrs	Copy & mail PPD pkg. Copies mailed	AA
2/24/98			1.75 hr.	E-mail PPD pkg to Dallee	
~~2/25/98~~					
4/15/97			0.75	Final Permit copies & mailed	file
5/13/98				Uploaded To Home - File & Tbl	SS
05/13/98			0.75	ADMS	E-IV
2/16/2000				Change of Permit Conditions Copied & mailed	file
3/14/05				Statement of Compliance	
7/16/04				Proposed changes to SOP	
10/28/04				Title V Permit Modification	
2/16/05				Proposed changes to SOP	
3/21/05				Permit amended NSPS/SSM	
7/16/04				Inform of recent malfunction of Landfill	
4/21/04				Design Plan Proposed Addendum	
4/29/04				4th qtr. Surface Emissions Monitoring Report	
10/7/04				Best Mgmt Practices - E Mail	
1/6/05				SEM Report	

Air Toxic Analysis: None Required for a Title V Project.

Conclusion:

Based upon the application, the department has been provided reasonable assurance the source can be operated in compliance with applicable air pollution rules and regulations provided the source is operated as specified in the application and permit conditions are met.

Scott Wesson

Scott Wesson

12/17/97

Date

ORANGE COUNTY UTILITIES – SOLID WASTE DEPARTMENT
5901 Young Pine Road ▪ **Reply To:** P.O. Box 720067 ▪ Orlando, Florida 32872-0067
(407) 836-6600 ▪ Fax (407) 836-6629
E-Mail: solidwst@mailhost.magicnet.net

A2

November 5, 1999

Mr. John Turner
Florida Department of Environmental Protection
Air Resources Management
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

RE: Statement of Compliance
Title V Permit Number 0950113-001-AV
Orange County, Florida

Dear Mr. Turner:

Enclosed please find one (1) copy of the Annual Title V Statement of Compliance for Title V Permit No. 0950113-001-AV for the Orange County Landfill located at 12100 Young Pine Road in Orange County, Florida.

We request the removal of the permit condition listed in Section II Facility-wide Conditions, Condition Number 1 which states that the permittee shall submit all applications, tests, reports, notifications or other submittals to the Orange County Environmental Protection Department.

If you have any questions please feel free to contact me at (407) 836-6654 or Mr. Stanley J. Keely, P.E. with Glace & Radcliffe, Inc. at (407) 647-6623.

Sincerely,

Orange County Solid Waste Division

Dan Morrical, P.E.
Chief Engineer

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name :
ORANGE COUNTY UTILITIES DIVISION

2. Site Name :
ORANGE COUNTY SOLID WASTE FACILITY

3. Facility Identification Number : * [X] Unknown

4. Facility Location :
Orange County Solid Waste Management Facility, located on Young Pine Road in southeast Orange County, serves the solid waste needs of the unincorporated areas of the County, and a majority of the incorporated municipalities (all incorporated areas except the cities of Maitland, Winter Park, and a portion of Apopka).

The existing Facility covers approximately 1,500 acres and borders the Orange County Eastern Regional Wastewater Treatment Facility to the north, the Orlando Utilities Commission (OUC) Stanton Power Plant to the east, State Road 528 to the south, and private properties to the west.

In anticipation of future solid waste needs of the community, the County has acquired approximately 3,500 acres of adjoining properties for future expansion and further development of the existing 1,500 acre Solid Waste Management Facility. Exhibit A-2 shows a depiction of the location of the Facility .

The existing activities and operations conducted on the grounds of the Facility can be organized into five functional areas:

1 - LANDFILL OPERATIONS: The Facility currently operates: a 58-acre Class I landfill (Cell 7B); a recently constructed 48-acre Class I landfill (Cell 8); a 32-acre Class III landfill; a 39-acre yard waste composting operation; a used tire shredding operation; a materials recovery facility; an household hazardous waste collection and storage facility; a white goods collection facility; and other related landfill activities.

2 - CLOSED LANDFILL MAINTENANCE: The closed landfills areas consist of: (a) 134-acres of Class I waste (Cell A-K) with 123 passive landfill gas vents; and (b) The pre-1985 closed fill areas which covers approximately 340-acres. The pre-1985 closed areas of the Landfill were generally filled using the trench method of disposal, and are comparatively lower than the other disposal areas of the site. This has allowed the County to develop Class III landfills in these areas.

3 - LEACHATE MANAGEMENT OPERATION: Includes a leachate treatment wetland system for the closed cells; and a leachate collection system, pump station, and 450,000 gallon leachate holding tank for the active cells. Leachate is pumped from the leachate holding tank to the nearby wastewater treatment facility.

4 - VEHICLE AND LANDFILL EQUIPMENT MAINTENANCE OPERATIONS: Includes a central vehicle maintenance shop building, several additional maintenance structures for different vehicle types, and an underground/above ground fuel storage and dispensing facility.

5 - MISCELLANEOUS ACTIVITIES: Other activities at this Facility include operation of a: citizen drop-off center, scale house, borrow pit, tire shredding facility, materials recovery facility, household hazardous waste transfer station, waste oil collection center, and automotive battery collection center.

The County is in the preliminary design stage to convert the existing passive landfill gas vents in Cell A-K into an active landfill gas collection and flare system.This project may also include connecting landfill gas vents from the A-K closed landfill to the current Class I Cell 7B and future Cell 8. The County is also evaluating the feasibility of utilization of the collected gases as an energy source. The County will prepare and submit a construction permit application separately, if required, for this project once the design is completed.

Street Address or Other Locator : 12100 YOUNG PINE ROAD
City ORLANDO County : ORANGE Zip Code : 32872-0067

5. Relocatable Facility?
[ ] Yes [X] No

6. Existing Permitted Facility?
[ ] Yes [ ] No

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Mr. Michael L. Chandler
Title : Manager, Solid Waste Dept.

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Orange County Solid Waste Dept.
Street Address : 5901 Young Pine Road
City : Orlando
State : FL Zip Code : 32872-0067

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone :(407)836-6600 Fax : (407)836-6629

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V sour*

_____ _____
Signature Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
No ID *	1,500 acre Solid Waste Management Facility +	

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to o

[X] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[ ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Category IV : All Non-Federally Enforceable Air Operation

This Application for Air Permit is submitted to o

[ ] Initial air operation permit for one or more existing, but previously unpermitted, emissions units.

[ ] Initial air operation permit for one or more newly constructed or modified

Current construction permit number :

[ ] Air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit renewal.

Operation permit to be renewed :

Application Processing Fee

Check one :

[ ] Attached - Amount : $0.00 [X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations : Orange County Public Utilities Title 5
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Mr. Mehran S. Beladi, P.E. Registration Number : FL 41819
2. Professional Engineer Mailing Address : Organization/Firm : CH2M/G&R JOINT VENTURE Street Address : 800 South Orlando Avenue City : Maitland State : FL Zip Code : 32751-5627
3. Professional Engineer Telephone Numbers : Telephone : (407)647-6623 Fax : (407)539-0575

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

_____ _____

Signature Date

(seal)

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Mr. Mehran S. Beladi, P.E.
Title : Project Manager

2. Application Contact Mailing Address :

Organization/Firm : CH2M/G&R JOINT VENTURE
Street Address : 800 South Orlando Avenue
City : Maitland
State : FL Zip Code : 32751-5627

3. Application Contact Telephone Numbers :

Telephone : (407)647-6623 Fax : (407)539-0575

Application Comment

This application is prepared and submitted to satisfy the requirements of chapter 62-213 F.A.C. for permitting major sources of air pollution in accordance wit Title V operation permit application. The requirements of FDEP for preparation of an Emissions Inventory from a solid waste management facility as a Title V source as defined in Rule 62-213.200 F.A.C. has been followed in preparation of this Operation Permit Application.

This Application covers the estimated emissions from closed Class I disposal areas where landfill gas vents have been installed, the estimated emissions from open Class I disposal areas, and the estimated fugitive emissions from other operations and activities on the grounds of this Facility. A landfill gas estimation modeling was conducted to determine the amount of gas being generated as a result of these landfill activities. Landfill gas samples were also analyzed by a qualified laboratory to determine the composition of the emitted gases. The results of the landfill gas quantity and quality is included in exhibit D of this Application.

In instances where data were available, the actual field data is used to determine the specific amounts of annual emissions. This includes utilization of the results of laboratory analysis of the existing gases emitting from the LFG vents. In instances where actual field data is not available, USEPA default values are used. This includes calculating emissions such as that associated with unpaved roads.

The Orange County Utilities Department is in the process of development of plans for construction of improvements to the existing passive landfill gas system whereas the system will be converted to an active LFG management system complete with collection piping, a blower and flare station and condensate disposal. The County will submit separately, at a later date, an Application for Air Construction Permit to FDEP.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 481.20 North (km) : 3150.30			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 28 52 Longitude (DD/MM/SS) : 81 11 30			
3. Governmental Facility Code : 2	4. Facility Status Code : C	5. Facility Major Group SIC Code : 99 +	6. Facility SIC(s) :

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

7. Facility Comment :

The Orange County Solid Waste Facility is operated by the Orange County Utilities Division . The Facility began operation in 1971 and currently covers approximately 1,500 acres. The County has purchased approximately 3,500 acres of adjoining properties for future expansion of the landfill. No solid waste landfill activities are conducted on the acquired property at this time. Although this new property is contiguous with the original landfill, all permits on file with regulatory agencies cover the original 1,500 acre site. Therefore, the purchased property is excluded from this permit application.

Existing landfill activities are as follows:

1 - ACTIVE CLASS I LANDFILL: The County currently operates Cell 7B as a Class I disposal area. This cell covers approximately 58-acres (+/-) and was first put into operation in 1990. The original design capacity of Cell 7B was permitted to be approximately 5,300,000 cubic yards. In 1994, the side slopes of this cell were partially closed by installing final cover and landfill gas vents, thus converting the cell to a Controlled Landfill. Cell 8, immediately to the south of Cell 7B, has been permitted and constructed as the next active Class I disposal area. This cell covers approximately 47.7 acres (+/-) and is estimated to have 6,600,000 cubic yards of capacity. The County is planning to start operation of Cell 8 in August 1996. At which time the remaining side slopes of Cell 7B will be requested for the second phase of partial Closure.

2 - CLOSED CLASS I LANDFILLS: Cell A-K, which covers approximately 134 acres (+/-), was permitted and closed by the County in 1994. As part of the closure construction, the County installed a 40-mil HDPE final cap covered with 24 inches of soil, and 123 landfill gas vents, thereby converting this Closed Cell to a Controlled Landfill. These vents release methane and Non-methane gases generated as a result of waste decomposition from the disposal cell. The County is planning to collect and dispose of these gases by thermal combustion. Additionally, the Facility has other Class I disposal areas which were closed prior to the 1985 FDEP Closure Rules and are not considered Controlled Landfills. A portion of these pre-1985 closed Class I cells is permitted by FDEP for vertical expansion as a Class III disposal area. Any gas generated as a result of the decomposition process of the remaining underlying Class I material is released through horizontal vents being constructed as part of the FDEP Class III Landfill Operations Permit.

3 - YARD WASTE COMPOSTING: The County has a permitted yard waste composting operation at this Facility. The operation covers approximately 39.6 acres (+/-). Yard waste and other vegetative matter delivered to the Facility are mulched and put in windrows for production of compost. The windrows are turned periodically for approximately 60 to 90 days until the composting process is completed. The final product is given away to private citizens for landscaping purposes, or used as cover material at the Class III disposal cell. Since no wastewater sludge is mixed with the yard waste during compost production, no substantial amount of Regulated or Hazardous gas is generated as a result of this operation. Therefore, possible emissions from this operation is considered Fugitive in this Application.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

4 - LANDFILL LEACHATE MANAGEMENT SYSTEM: Landfill leachate from Cell 7B (and future Cell 8 when operational) is collected and transmitted to a 450,000 gallon leachate holding tank. The collected leachate is pumped automatically to the Orange County Eastern Regional Wastewater Treatment Facility, immediately north of the Orange County Solid Waste Management Facility for treatment and disposal. Landfill gases which enter the leachate collection piping currently escape to the atmosphere. Landfill gases such as methane and non-methane which enter the leachate collection pipings currently escape to the atmosphere. The inventory for the quantity and quality of these gases have been included in the LFG modeling of Cell 7B and do not need to be included as a separate source in the overall emissions inventory of the Facility.

5 - MATERIALS RECOVERY FACILITY: The Materials Recovery Facility (MRF) receives residential and commercial recycled materials collected by Orange County franchised haulers. These materials are further sorted and shipped out to recycling markets by County contracted firms. The recycled materials delivered to the MRF include paper products, plastic products, glass and metals. Therefore, no substantial gases are generated as a result of this operation.

DEP Facility Comment

Facility Contact

1. Name and Title of Facility Contact :

   Mr. Michael L. Chandler
   Manager, Solid Waste Department

2. Facility Contact Mailing Address :
   Organization/Firm : ORANGE COUNTY SOLID WASTE DEPT.
   Street Address : P.O. BOX 720067
   City : ORLANDO State : FL Zip Code : 32872-0067

3. Facility Contact Telephone Numbers :
   Telephone : (407)836-6600 Fax : (407)836-6658

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : East (km) : North (km) :			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : Longitude (DD/MM/SS) :			
3. Governmental Facility Code :	4. Facility Status Code :	5. Facility Major Group SIC Code +	6. Facility SIC(s) :
7. Facility Comment :			
DEP Facility Comment : +			

Facility Contact

1. Name and Title of Facility Contact :
2. Facility Contact Mailing Address : Organization/Firm : Street Address : City : State : Zip Code :
3. Facility Contact Telephone Numbers : Telephone : Fax :

Property Boundary

UTM Coordinates :

Zone : + East : km + North : km +

Building Identification

Identification of Building on Plot Plan or Flow Diagram :

+

Building Height : FT +

Building Boundary

UTM Coordinates :

Zone : + East : km + North : km +

Facility Contact

1. Name and Title of Facility Contact :

Name : Mr. Michael L. Chandler
Title : Manager, Solid Waste Department

2. Facility Contact Mailing Address :

Organization/Firm : ORANGE COUNTY SOLID WASTE DEPT.
Street Address : P.O. BOX 720067
City : ORLANDO
State : FL Zip Code : 32872-0067

3. Facility Contact Telephone Numbers :

Telephone : (407)836-6600 Fax : (407)836-6658

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

Section 60.752(2)(b) of 40 CFR Parts 51, 52, and 60 requires an MSW landfill with a design capacity greater than or equal to 2.5 million mega-grams or 2.5 million metric tons be considered a Major Source of Air Pollution, and submit an annual Emissions Report to the Administrator. The Orange County Solid Waste Facility, with a current Design Capacity of approximately 6.5 million Metric Tons (mega-grams), falls under this category.

Chapter 62-213 of the Florida Administrative Code stipulates the permit requirements for major sources of air pollution, also known as Title V sources. Under this rule, landfills are considered major sources if they emit or have the potential to emit gas at or above the following thresholds: (1) 10 tons per year of any single hazardous air pollutants (HAPs); (2) 25 tons per year of any combination of hazardous air pollutants; or (3) 100 tons per year of any regulated air pollutants (RAPs).

The estimated air emissions for the Orange County Solid Waste Facility exceeds these thresholds. Landfills that are classified as major air pollution sources under Chapter 62-213, F.A.C. are required to apply for a Title V Operation Permit from FDEP.

Ozone SIP Facility : +

Annual Operating Report Required : +

B. FACILITY REGULATIONS

Rule Applicability Analysis

1. DESIGN CAPACITY THRESHOLD ANALYSIS:

   a. Cell 7B Design Capacity = 2,900,000 Metric Tons

   b. Cell 8 Design Capacity = 3,600,000 Metric Tons

TOTAL DESIGN CAPACITY = 6,500,000 Metric Tons

2. EMISSION THRESHOLDS:

Based on the results of landfill gas modeling and laboratory analyses of random LFG gas samples, the annual quantity of volatile organic compounds emissions, indicative of HAPs and RAPs, were calculated. These calculations, included in Exhibit G, show the OCSWF currently exceeds emission thresholds. To summarize the results of the calculations, the current estimated annual mass emissions is 37.48 Mg (metric tons). This quantity is projected to peak in the year 2002 at an estimated 81.85 Mg (metric tons) on an average yearly basis.

These emissions estimates are based on current landfill operation methods. Once the active landfill gas collection and flare system is constructed and becomes operational, emissions from the landfill will be substantially reduced.

B. FACILITY REGULATIONS

List of Applicable Regulations

See Exhibit E for list of applicable Facility Regulations.

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
VOC	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted : VOC

2. Requested Emissions Cap : (lbs/hour) (tons/year)

3. Basis for Emissions Cap Code : RULE

4. Facility Pollutant Comment :

The estimated annual emissions for 1996 are shown in detail in Exhibit G of this application. The majority of these emissions are generated in the existing Controlled Landfills. It is anticipated that these emissions will be substantially reduced by thermal oxidation once the proposed flare station is constructed and operating.

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	EXHIBIT A
2. Facility Plot Plan :	EXHIBIT B
3. Process Flow Diagram(s) :	NA
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	EXHIBIT C
6. Supplemental Information for Construction Permit Application :	NA

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	EXHIBIT C
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	NA

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility +

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : * 1,500 acre Solid Waste Management Facility Description of Emissions Unit for AIRS Tracking : + 1,500 acre Solid Waste Management Facility		
2. Emissions Unit Identification Number : No ID * [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A *	4. Acid Rain Unit? [ ] Yes [X] No *	5. Emissions Unit Major Group SIC Code : 99 +
6. Emissions Unit Comment :		

This Emissions Unit consists of the collective solid waste-related operations and activities on the grounds of the 1,500 acre Facility. Therefore, there is no single, individual point source within this Facility that can be listed for the purpose of this Application.

It is requested that all operations and activities on the grounds of this Facility be considered as one unit at this time. The County may request to modify this designation once the permit application for construction of the active landfill gas system is submitted to FDEP, or when the landfill activities are expanded to the adjoining County property in the future.

PERMIT SHIELD REQUEST: Based on the information provided in this application, the Orange County Utilities Division requests the following determinations during the review of this application and issuance of the Air Operating Permit for the Orange County Solid Waste Management Facility:

A. This permit application is submitted to FDEP with the expectation that an air operating permit will be issued that will contain a permit shield as provided by F.A.C. 62-213.460 for all applicable requirements that are specifically identified in the permit.

B. Certain requirements in this application have been designated as not applicable to Facility emissions or operations, or being applicable only to a specific regulatory agency. This permit application is submitted to FDEP with the expectation that the operating permit will contain a permit shield for all inapplicable requirements that are specifically identified in this application.

C. The Orange County Utilities Division anticipates that its assessment of insignificant emission units at the Facility will be reviewed and incorporated into the permit shield.

D. This permit application is submitted to FDEP with the expectation that any permit requirement that is not federally enforceable will be specifically designated in the permit as a non-federally enforceable, state only requirement.

E. The Orange County Utilities Division reserves the right to submit a revised list of permit shield request during the review process of this application, or at the time of construction permit application for construction of the active landfill gas collection and flare system.

DEP Emissions Unit Comment :

Similar-Emissions Unit Identification Numbers for Fee Purposes :

+

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Emissions Unit Control Equipment 1

1. Description :
2. Control Device or Method Code : *

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Emissions Unit Details

1. Initial Startup Date :	01-Jan-1971
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : N/A	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	Degrees Fahrenheit Seconds Degrees Fahrenheit
Emissions Unit Type Code : 99 +	
Ozone SIP Base Emissions Unit : +	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate :		
5. Operating Capacity Comment : N/A		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week

	52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Rule Applicability Analysis

EMISSION THRESHOLDS:

Based on landfill gas modeling and the results of laboratory analyses of random LFG gas samples, the annual quantity of VOCs (as HAPs and RAPs) emissions was calculated. These calculations, which are included in Exhibit G of this submittal, show that this Facility currently exceeds permissible thresholds.

To summarize the results of the calculations, it was estimated that the annual mass emissions from this Facility at the present time equals 37.48 Mg (metric tons) on an annual yearly basis, and is projected to peak in the year 2002 to an estimated 81.85 Mg (metric tons) on an average yearly basis.

Based on Section 60.752(2)(b) of 40 CFR Parts 51, 52, and 60, this solid waste facility exceeds the design capacity threshold. Based on 62-213 F.A.C., this solid waste facility emits or has the potential to emit gas at or above the thresholds.

The estimated emissions are based on site-specific data and will be reduced substantially once the active landfill gas collection and flare system is developed and becomes operational.

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

List of Applicable Regulations

See Exhibit F for list of applicable regulations for this emission unit.

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	N/A
2. Emission Point Type Code :	3 *
3. Descriptions of Emission Points Comprising this Emissions Unit :	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : N/A	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	°F *
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
Good Engineering Practice Height :	+
14. Emission Point Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : N/A	
2. Source Classification Code (SCC) : *	
3. SCC Units :	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : Percent Sulfur Limit : +	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - VOC *	*		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Pollutant Detail Information : Pollutant 1

1. Pollutant Emitted : **VOC** *
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 20.56 lb/hour 81.85 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: 4 5.00 to 25.00 tons/year
6. Emissions Factor : Reference : Unit Code : +*
7. Emissions Method Code : 3 *
8. Calculations of Emissions : SEE EXHIBIT G
9. Pollutant Potential/Estimated Emissions Comment : The annual emissions estimate for 1996 is provided in Exhibit G of this Application. The majority of these emissions are generated in the existing Controlled Landfills. It is anticipated, that these emissions will be substantially reduced by thermal oxidation once the proposed Flare Station is constructed and operational.

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code : RULE *
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units : * *   Allowable Emissions Unit :
4. Equivalent Allowable Emissions :   lb/hour tons/year
5. Method of Compliance :   The Environmental Compliance Personnel at the Facility are required by a condition of the existing Operating Permit to monitor landfill gas probes on a quarterly basis, and record any migration of LFG beyond the boundaries of the disposal cells. Other compliance and operational modifications are planned for the proposed active LFG system.   Compliance Method Code : +* Compliance Test Frequency : +*   Fequency Base Date : +   Regulation : +*
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Emissions Unit Information Section _____

Pollutant Information Section _____

Allowable Emissions Information Section _____

Test Methods

Effective : 3-21-96

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
1,500 acre Solid Waste Management Facility

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : *
2. Basis for Allowable Opacity : *
3. Requested Allowable Opacity : Normal Conditions : % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : N/A
5. Visible Emissions Comment : N/A Compliance Test Frequency : 0 + Frequency Base Date : + COM Required : + Regulation : +*

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section _____

Continuous Monitoring System Continuous Monitor _____

1. Parameter Code : *	2. Pollutant(s):
3. CMS Requirement	CMS Requirement Code : +
4. Monitor Information Manufacturer : Model Number Serial Number	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	
Performance Specification Test Status : + Certification Date (DD-MON-YYYY) : +	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : U	SO2 : U	NO2 : U

4. Baseline Emissions :

PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year

5. PSD Comment :

No thermal oxidation units currently exist on-site. Therefore, the increment consuming emissions do not apply to this Facility at this time.

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

1,500 acre Solid Waste Management Facility

Supplemental Requirements for All Applications

1. Process Flow Diagram :	NA
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Flor Department of

Memorandum Environmental Protection

CENTRAL DISTRICT

To: Alan Zahm, P.E., Air Permitting Supervisor

From: Len Kozlov, P.E., Program Administrator, Air Resources Management

Date: June 23, 1997

Subject: Signing Incompleteness Letters for Title V Applications

From the date above I am authorizing you to act as the appropriate person to sign all title V incompleteness letters. The permitting section shall review the applications and issue incompleteness letters.

lk70623

07/11/97 08:56 ☎352 335 2959 CH2M HILL/GNV 001/008

AZ
JTSW File

Orange County Landfill

Len Kostal 7/10/97 - your copy

DATE: 7/10/97

RETURN ORIGINAL: INTEROFFICE MAIL ☐ CALL FOR PICKUP ☐
HAND DELIVER ☐ DISCARD ☐

CH2MHILL

TO/FIRM: Don Morrical
FDEP

SPECIAL INSTRUCTIONS:

FAX NO.: 407 / 897-2966

FROM: Bo Brunen

VERIFICATION NO.:

TOTAL NO. OF PAGES (INCLUDING THIS PAGE): 8

IF PAGES ARE MISSING OR ILLEGIBLE,
PLEASE CALL (352) 335-5877, EXT. 241.

FAX OPERATOR:
TIME SENT: A.M. ☐ P.M. ☐

MESSAGE:

CH2M HILL
GAINESVILLE OFFICE

3011 S.W. WILLISTON ROAD 32608-3928
P.O. BOX 147009
GAINESVILLE, FLORIDA 32614-7009

(352) 335-7991
FAX (352) 335-2959

MEMORANDUM

TO: Attendees
Al Valenti/OCUD
Bruce Cole/CH2M/G&R
Rick DiGia/BES

FROM: Bo Bruner, Project Manager

PROJECT: Landfill Gas Management System (Cells A-K & 7B)
and Cell 7B Phase 2 Sequential Closure
Solid Waste Management Facility
Orange County, Florida

SUBJECT: FDEP Permitting Requirements, Pre-Application Conference

DATE: June 16, 1997

A meeting was held at the Florida Department of Environmental Protection (FDEP) Central District Office on May 28, 1997 to discuss permitting issues associated with the above referenced project. The purpose of the meeting was to provide an overview of the project, review the existing permits and County's plan for Modifications of these permits, as well as discussing the extent of the FDEP permit application requirements.

In attendance were the following:

For OCUD	For CH2M/G&R	For FDEP	
Willie Smith	Bo Bruner	Dan Morrical	Len Kozlov
Mike Chandler	Ron Beladi	Jim Bradner	Scott Wesson
Erik Melear	Stan Keely	Allen Zahm	George Cheryan
	K.R Chang	John Turner	A. Sobolevskiy
For BES	Susanna Rehmann/APEX	Caroline Shine	
Todd Terhune/SCS			

This memorandum presents the writer's opinion and interpretation of the meeting. Unless advised in writing to the contrary, it is assumed those in attendance are in agreement with the statements set forth and Work will proceed on this basis.

The issues discussed and decisions made at the meeting were as follows:

I. Introduction of People and Roles - The above listed attendees introduced themselves and explained their role in the project. Bo Bruner is the Project Manager and primary point of contact for the CH2M/G&R and Willie Smith is the Project Manager and primary point of contact for OCUD. For FDEP, primary points of contact are: Dan Morrical - Solid Waste, Jim Bradner - Environmental Resources, and Len Kozlov - Air.

II. Overview of Project

A. Overall Plan - Bo Bruner explained the location and interrelationship of improvement facilities using a site aerial photograph. The following items are included in the project:

1. Conversion of the existing passive LFG system in Cell A-K to active system and transmitting the collected LFG to a common flare station near the existing leachate holding tank

2. Sequential closure of Cell 7B from elevation 160 NGVD on the west and north slope and elevation 100 NGVD on the east slope to elevation 228 NGVD

3. Conversion of the existing passive LFG system in Cell 7B to active system, expansion of the LFG system for the new closure areas, and transmitting the collected LFG to the flare station

4. Utilization of the collected LFG at the Curtis Stanton Power Plant. The County has entered into a Contract with Biomass Energy Services (BES) for utilization of the collected LFG. BES has an Agreement with OUC to transmit the LFG to the power plant for use as fuel. BES will operate and maintain the County's LFG system once construction is completed.

B. Cell 7B Sequential Closure - Bo Bruner described the closure system using plan and cross-section drawing of Cell 7B

1. Closure Final Cover Concepts

a) Closure from 160 NGVD on the west and north slope and elevation 100 NGVD on the east slope to approximately 228 feet.

b) Existing Phase 1 liner is co-polymer (HDPE/VLDPE/HDPE). A 40 mil linear low density polyethylene (LLDPE) textured geomembrane covered by 18 inches of granular fill and 6 inches of top soil will be used for the Phase 2 closure system.

2. Stormwater Management - Existing system consist of terraced swales with three (3) downpipe structures to stormwater pond No.3. Based on preliminary calculations, the existing downpipes do not appear adequate to handle the additional stormwater volume from the proposed sequential closure. The secondary stormwater system will be re-evaluated to determine if the existing pipes should be replaced with larger sized pipes, or additional downpipe structures be added. Additional inlets and pipes will probably be

added, rather than pipe replacement. The proposed stormwater management for the sequential closure will consist of:

a) Swales every 20 feet vertically. Drain to inlets and downpipes structures. Swales will have underdrain piping to remove soil moisture and break the soil saturation front at each swale.

b) Primary stormwater management system (Ponds 3 and 4) will also be re-evaluated based on revisions to the secondary collection system to determine adequate capacity.

C. Landfill Gas Management System - Bo Bruner described the LFG management systems using drawings of the Cells A-K and 7B collection systems, the Cells A-K transmission pipeline, a typical condensate sump, and the flare station/processing facility.

1. Cells A-K - A field study was conducted to evaluate the condition and integrity of the existing 123 vents. Based on this study and review of the as-built drawings 83 of 123 vent will be connected to the active collection system and 7 new vents will be installed to replace and/or supplement the existing vent system. The eliminated vents, which constitute approximately 1.4 percent of the total passive LFG flow, will be capped as part of this construction.

2. Cell 7B - All 28 of the existing vents will be connected to the active collection system. Twenty-five (25) new vents will be installed on the closed portion of the landfill. Five (5) new temporary vents and collection piping will be installed on the unclosed south slope of Cell 7B. Twenty-four (24) leachate clean-out and Manhole No. 5 near the leachate pump station will also be connected to the active collection system.

3. LFG Transmission Pipeline - Landfill gas from Cells A-K and 7B will be transmitted to a common Flare Station in the vicinity of the existing Leachate Holding Tank. County plans to construct the transmission pipe from Cell A-K to the flare station under a separate construction contract. This 18-inch diameter HDEP pipe will run from a main valve box the toe of Cell A-K along the existing paved road to a stub-out for Cell 7B transmission pipe and continue with a 24-inch HDEP pipe to the flare station. The transmission pipe from Cell 7B to the Flare Station will be constructed as part of the Closure construction.

4. Condensate Management System

a) Cells A-K - Condensate sumps will be installed at low points. Sumps will be manually pumped. Local and remote

(at flare station) visual indicators will be included for high water level. Eductor pumping system will be used. Condensate will be removed from the sumps and hauled to the leachate storage tank by a dedicated trailer.

b) Cell 7B - Where practical, condensate will be drained to the leachate collection system through the leachate clean-outs. Current plan calls for condensate drainage and LFG removal through common pipe. A plan for controlling LFG flow is being developed for the clean-out connections. Where clean-outs are not available condensate sumps similar to those at Cells A-K will be installed.

c) Cells A-K Transmission Pipe - Condensate sumps similar to those described for Cells A-K will be installed at low points.

d) Condensate Knock-out Vessel - Above ground knock-outs will be installed in front of the exhausters. Knock-outs will drain to underground sump similar to the condensate sumps for A-K. Submersible pump(s) will be used instead of eductor.

e) Stanton Power Plant Transmission Pipe - A transmission pipe will be installed by BES from the flare station to Stanton Power Plant with condensate sumps at low points. BES is still evaluating the configuration of this transmission piping and method of pumping the condensate back to leachate holding tank.

5. Flare System - The flares will serve as a back-up system to the utilization of LFG at the power plant. Open candle flares will be used because they are more reliable when used in a standby mode and are more cost effective. Two (2) flares are planned as part of this construction.

III. Utilization/Processing Facility - Various configurations for the flare station/processing facility were evaluated to determine the preferred exhauster configuration for handling the vacuums required for the LFG vents in Cells A-K and 7B, and delivery of the gas to the power plant. The power plant requires an operating pressure of approximately 10 psi which equates to approximately 20 psi at the exhauster discharge to account for pipeline losses. BES has indicated that they prefer a system with four (4) exhausters at 250HP each installed at the flare station. These blowers will have sufficient capacity to collect gas from Cells A-K and 7B and deliver the gas to the power plant. The exhauster can also be used to deliver the gas to the flares, when necessary.

IV. Permits

A. Closure Permit Modifications - The County plans to submit one permitting package for construction of this project. The package will include two (2) applications to modify the existing closure permits for Cell A-K and Cell 7B, and one (1) set of back-up documentation to eliminate duplicity. Where required, specific references (title, author, date, section, and page) will be made to previously submitted documents, but the documents will not be resubmitted. The FDEP agreed with these concepts.

1. Cells A-K - Application for modification will address LFG collection system, Cells A-K LFG transmission pipe, and condensate management system.

2. Cell 7B - Application for modification will address cover system, LFG collection system (vents and leachate clean-outs), and condensate management system.

B. Environmental Resources Permit Application Cell 7B - Will address the primary and secondary stormwater drainage system, including modification to the existing closure system.

C. Title V Operating Permit - Permit application was submitted in June 1996. Verbal response from FDEP Tallahassee is that the Title V application is complete and a permit will be issued in 1998. Mr. Kozlov stated that:

1. County as owner of the Facility is responsible for this Permit, not BES. The Facility as a whole is considered one Emission Unit with the County as the Owner.

2. Additional information will be requested by the FDEP Central District Air Section, before Title V permit is issued. Specifically, the Title V Permit Application must be modified to account for emissions reduction from gas collection and utilization system.

D. Annual Emissions Inventory

1. Bo Bruner indicated that the following assumptions would be used for estimating the annual LFG emissions:

a) Basic assumption for emissions reduction will be that reduction for gas sent to Stanton Power Plant is 100 percent efficient from landfills point of view.

b) Annual flare operating time estimate (probably 1 month) will be used for emissions estimate from flare.

2. FDEP Central District Air staff indicated that for Title V emissions were based on "potential to emit" and that oxidation through the flares could take place 24 hours a day 365 days a year and that this might constitute the "potential to emit".

3. CH2M/G&R, the County and BES will provide a reasonable estimate of the "potential to emit" in the permit modification application including an explanation of the rationale used to make the estimate.

E. Air Construction Permit - Emission estimates will be provided for LFG collection system, flares and utilization/processing facility as part of Solid Waste Permit Application. An Air Construction Permit will not be require unless trigger level are exceeded (VOC, NOx, etc.).

V. Schedule - See attached.

Estimated Permitting, Design and Construction Schedule
Landfill Gas Management System and Cell 7B Phase 2 Sequential Closure
Orange County Solid Waste Facility

Activity	1996				1997												1998									
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Submittal of Task Authorization for Cell 7B Closure to OCUD	^																									
Submittal of LFG Preliminary Design Report to OCUD		^																								
Execution of LFG Right Agreement between County and BES				^																						
BOC Approval of Design TA for Phase 2 Closure and LFG Systems					^																					
Preliminary Design of Phase 2 Closure and LFG System for Cell 7B					X X X	X X X X	X X X X																			
OCUD Review of Preliminary Design Drawings for Cell 7B Closure and LFG								X X																		
Submittal of Cells A-K Drainage Modification TA to OCUD							X																			
Submittal of Cell 7B Phase 1 Drainage Modification TA to OCUD								X																		
BOC Approval of Cells A-K and 7B Drainage Modification TA's										X																
Prepare 90% Design Submittal for LFG and Closure Systems							X X	X X X X	X X X X	X X X																
OCUD Review of 90% Design											X X															
Prepare Final Bid Documents											X X X															
Prepare of Air and Closure Construction Permit Applications							X X X X	X X X X	X X X X	X X X																
OCUD Review of Permit Applications											X X															
Revise Permit Applications											X X															
FDEP Review of Permit Applications												X X X X														
Prepare Response to FDEP Comments													X X													
Permit Issued													^													
Advertisement to Bid												^														
Pre-Bid Conference												^														
Bid Opening													^													
Review Bids and Recommend Award													X													
Award of Contract by BOC														^												
Authorization to Proceed with Construction														^												
Construction of Closure and LFG Systems														X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X
Start-up of Flare Station																					X	X				
Substantial Completion																						^				
Operational Shake-Down Period for Flare Station																						X X X	X			
Final Acceptance of Flare Station by County																							^			
Deadline for Section 29 Tax Credits																								^		

Completed Activities

Planned Activities

Note: The Section 29 tax credits expire if the LFG collection and processing facilities are not operational by June 30, 1998.

Department of
Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

MEETING ATTENDANCE RECORD

5/28 1:30

Purpose: Orange County Landfill - LFG Date: Wed, ~~5/30/97~~ ~~2:00PM~~

Name (please print)	(Permit Mod.) Affiliation
Dan Morrical	DEP
TODD TERHUNE	SCS ENGINEERS
Scott Wesson	DEP - Air
GEORGE CHERYAN	DEP
Alan Zahm	DEP-AIR
LEN KOZLOV	DEP
A. Sobolewski	FDEP
R. J. Brunen III	CH2M HILL
Ron BERADI	Glace & Radcliffe
Stan Keely	G&R
Jim Bruning	DEP/Stormwater
SUSANNA REKMAN	APEX ENG.
K. R. Chany	CH2M HILL
Michael Chandler	Orange County
WILLIE E. SMITH	ORANGE COUNTY
Caroline Shine	DEP - Air
ERIK Melear	OC Solid Waste

Continued on reverse side

Agenda

Orange County Utilities Division
Landfill Gas Management System and
Cell 7B Phase 2 Sequential Closure Permitting Meeting
May 28, 1997, 1:30 p.m.

Attendees:

For OCUD	For CH2M/G&R	For FDEP
Willie Smith	Bo Bruner	Dan Morrical
Karen Allen	K.R Chang	Richard Lott
Mike Chandler	Stan Keely	Bill Bostwick
Erik Melear	Ron Beladi	Bret LeRoux
		John Turner or Allen Zahm

Topics:

I. Introduction of People and Roles

II. Overview of Project

- A. Overall Site Plan
- B. Cell 7B Sequential Closure
  1. Closure Concepts
  2. Stormwater Management
- C. Landfill Gas Management System
  1. Cells A-K
  2. Cell 7B
  3. Transmission Pipeline
  4. Condensate Management System
  5. Flare System
  6. Utilization/Processing Facility

III. Permits

- A. Closure Permit Modifications
  1. Cells A-K
  2. Cell 7B
- B. Environmental Resources Permit Application Cell 7B
- C. Title V Operating Permit
- D. Air Construction Permit

IV. Schedule

Estimated Permitting, Design and Construction Schedule
Landfill Gas Management System and Cell 7B Phase 2 Sequential Closure
Orange County Solid Waste Facility

Activity	1996				1997												1998											
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Submittal of Task Authorization for Cell 7B Closure to OCUD	^																											
Submittal of LFG Preliminary Design Report to OCUD		^																										
Execution of LFG Right Agreement between County and BES				^																								
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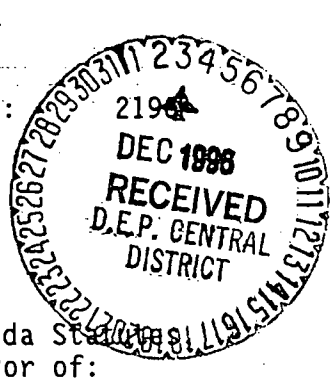
Preliminary Design of Phase 2 Closure and LFG System for Cell 7B					X X X	X X X X	X X X X																					
OCUD Review of Preliminary Design Drawings for Cell 7B Closure and LFG								X X																				
Submittal of Cells A-K Drainage Modification TA to OCUD							X																					
Submittal of Cell 7B Phase 1 Drainage Modification TA to OCUD								X																				
BOC Approval of Cells A-K and 7B Drainage Modification TA's										X																		
Prepare 90% Design Submittal for LFG and Closure Systems							X X	X X X X	X X X X	X X X																		
OCUD Review of 90% Design Submittal										X	X																	
Prepare Final Bid Documents											X X X																	
Prepare of Air and Closure Construction Permit Applications							X X X X	X X X X	X X X X	X X X																		
OCUD Review of Permit Applications										X	X																	
Revise Permit Applications											X X																	
FDEP Review of Permit Applications											X	X X X																
Prepare Response to FDEP Comments												X	X															
Permit Issued													^															
Advertisement to Bid												^																
Pre-Bid Conference												^																
Bid Opening													^															
Review Bids and Recommend Award													X															
Award of Contract by BOC														^														
Authroization to Proceed with Construction														^														
Construction of Closure and LFG Systems														X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X					
Start-up of Flare Station																					X X							
Substantial Completion																					^							
Operational Shake-Down Period for Flare Station																					X X X	X						
Final Acceptance of Flare Station by County																						^						
Deadline for Section 29 Tax Credits																							^					

Completed Activities

Planned Activities

DEP 14-081
DBF AA-4

REFUND REQUEST #: 2194



APPLICATION FOR REFUND FORM
THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA, COUNTY OF ORANGE

Pursuant to the provisions of Section 215.26, or Section _____*, Florida Statutes, I hereby apply for a refund and request that a State Warrant be drawn in favor of:

NAME: ORANGE CO BD OF CO COMMISSIONERS
ADDRESS: 109 E CHURCH ST ORLANDO, FL 32801-3318
FEID OR SS NUMBER:
AMOUNT: $10,345.00 DEPOSIT DATE: 13-AUG-96 DEPOSIT: 370520
DOCUMENT NUMBER: SYS RECEIPT#: 99425
REV OBJECT CODE: 2222 AIR CONSTRUCT

which represents moneys I paid into the State Treasury subject to refund, and to substantiate such claim the following facts are submitted:

REASON FOR CLAIM: NO FEE DUE

CERTIFIED TRUE AND CORRECT this 2nd day of DECEMBER, 1996.

_____, P.E.
Applicant's Signature

*Must be completed if authority is other than Section 215.26, Florida Statutes.

****

(FOR AGENCY USE ONLY)

(1) Agency recommends denial of above claim based on the following facts, including statutory authority for collection:

_____

OR

(2) Agency recommends approval of above claim and submits the following information to substantiate such claim. $10,345.00 was originally deposited into the State Treasury, Receipt _____, dated _____.
NAME OF ACCOUNT:

SAMAS ACCOUNT CODE
3720252600137_____00000000020000

Statutory Authority for Collection _____
It is requested that payment be made from:
NAME OF ACCOUNT:

SAMAS ACCOUNT CODE
3720252600137_____00000022000000

****

CERTIFIED TRUE AND CORRECT this 4 day of Dec, 1996.

_____ DCDS
Signature and Title of Authorized Person

****

SECTION 215.26 STATES, IN PART: "APPLICATION FOR REFUNDS AS PROVIDED BY THIS SECTION SHALL BE FILED WITH THE COMPTROLLER, EXCEPT AS OTHERWISE PROVIDED HEREIN, WITHIN 3 YEARS AFTER THE RIGHT TO SUCH REFUND SHALL HAVE ACCRUED ELSE SUCH RIGHT SHALL BE BARRED." Three years is interpreted as meaning three years from the date of payment into State Treasury.

I N T E R O F F I C E M E M O R A N D U M

Date: 23-Aug-1996 03:15pm EST
From: Theresa Bouldin ORL
BOULDIN_T
Dept: Central District Office
Tel No: 407/894-7555
SUNCOM: 325-3334

TO: Kris Tulloch ORL (TULLOCH_K)
TO: Delores Vanderpool ORL (VANDERPOOL_D)

Subject: Orange Co Solid Waste Landfill/Refund/Title V

APPLICATION FOR REFUND FORM
THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA, COUNTY OF Orange ______________________________

Pursuant to the provisions of Section 215.26, or Section ____________, Florida Statutes, I hereby apply for a refund and request that a State Warrant be drawn in favor of:

NAME: Board of Co. Commissioners, Orange Co. Florida ____________

ADDRESS: Orange Co. Public Utilities, 109 E. Church Street ______________________

Orlando, FL 32801-3318

FEID OR SS NUMBER: (AIRS ID) 0950113-001-AC ________________

AMOUNT: ___$ 10,375.00 ____________ REV OBJECT CODE: ______________

DOCUMENT NUMBER: _________ MONEY SHEET DATE: ______________

which represents moneys I paid into the State Treasury subject to refund, and to substantiate such claim the following facts are submitted:

REASON FOR CLAIM: Title V/Fee not required ______________

CERTIFIED TRUE AND CORRECT this ________ day of __________, __________

____
Signature

*Must be completed if authority is other than Section 215.26, Florida Statutes.

****

(FOR AGENCY USE ONLY)

(1) Agency recommends denial of above claim based on the following facts,

including statutory authority for collection:

____

or

(2) Agency recommends approval of above claim and submits the following information to substantiate such claim. $ ________was originally deposited into the State Treasury, Receipt # __________________, dated ________________.

SAMAS ACCOUNT CODE

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Statutory Authority for Collection ____________________ It is requested that payment be made from:

SAMAS ACCOUNT CODE

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

****

CERTIFIED TRUE AND CORRECT this ______ day of ___________, 19 ______.

____
Signature and Title of Authorized Person

Theresa 21 Aug 96

Please do a refund on this project.
for
£7500.

Thanks
Al

Date: 8/21/96 8:51:53 AM
From: John Brown TAL
Subject: The Orange County Solid Waste Management Facility Permit

The Orange County Facility submitted a Title V application to CFD on 14 June. Len, Alan Zahn, John Turner, Henry Estevez, Tom Cascio and I discussed the application and how to handle it during our visit to CFD on August 20. We agreed that the CFD should let it go complete by default (it is now complete since it was stamped received by the District on June 14).

There is some question about whether PSD may have applied to this source - Alan Zahm's message indicates that the source reported 414 TPY of VOC emissions. The applicant submitted a check for $10,375 believing he owed this in Title V fees. That should be returned since the source has no air permit at this time. The CFD ur stands that. Also, the data processing person at the CFD as. . for $7500 , presumably because it was thought to be an application for an AC permit. That request will be voided by Len.

Today, I talked with the engineer who submitted the application and explained the Title V fee process (the owner will be billed by BAR in December after his initial air permit is issued). He told me that he is preparing the engineering to install a system to control the emissions per Subpart WWW. He wants to start the installation around the first of the year and has not yet requested an air or solid waste permit.

It is my understanding that Larry has the lead (or at least some coordination) to effect a consolidated air and solid waste preconstruction permit. If so we may need to expedite that effort. Right now we don't know what to tell anyone. To get this issue resolved I proposed to Mr. Ron Beladi, Engineer for the landfill, that he send a letter to Clair that outlines what they want to do and that he request a meeting with Clair, Al, Venkata (Larry) Len ,the Solid Waste Division representative in the CH and in Tallahassee and me. If such a meeting is not appropriate , we can tell him so. Mr Belad asaked me whom he should meet with . These persons were suggested.

I can adequately answer the Title V questions but do not know how the preconstruction review is to be done. The District is awaiting guidance on that. Al, I have a copy of the Title V application if you want to peruse it to review whether new source review may apply. There are more that one landfill representatives who want some answers on how we are going to meet the preconstruction review requirements. How can I help?

To: Alan Zahm ORL
To: John B. Turner ORL
To: William Bostwick ORL
To: Dan Morrical ORL
To: Vivian Garfein ORL
CC: Dina Jones ORL
CC: Stephanie Lalonde ORL

Date: 8/21/96 10:17:56 AM
From: Leonard Kozlov ORL
Subject: FWD: The Orange County Solid Waste Management Facility Permit
To: See Below

Folks:

This is primarily informational. Presently this title V issue is being dealt with in air, but down the road waste management may be involved with the air program in combining permitting requirements of both programs into one permit.

Len

Date: 6/17/96 1:26:57 PM
From: Alvaro Linero TAL
Subject: Landfill - Orange County SWM Facility
To: Alan Zahm ORL
CC: Teresa Heron TAL

Alan. We looked this one over. We would need to know more, however, from what you provided it looks like it is not PSD as of right now. Looks like it got to 415 TPY in an incremental fashion over a lot of years rather than from specific projects which would have triggered PSD.

If they implement a thermal oxidation project, their VOC emissions will be way down and probably will not increase sulfur dioxide emissions above the significant levels to trigger PSD. Most likely, this source will be affected by Subpart WWW applicable to l[illegible]fills. If they get into energy recovery by burning the gas in s[illegible] engines or turbines, there will likely be other NSPS involved.

Call Teresa to discuss if you see the need.