

Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

November 22, 2004

Mr. Lee Schmudde Responsible Official Walt Disney World Company Walt Disney World Resort Complex P.O. Box 10,000 Lake Buena Vista, FL 32830-1000

Re:

PROPOSED Title V Permit Revision No. 0950111-024-AV

Walt Disney World Resort Complex

Dear Mr. Schmudde:

One copy of the "PROPOSED PERMIT REVISION DETERMINATION" for the Walt Disney World Resort Complex, located at 1375 Buena Vista Drive, Orange and Osceola Counties, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit revision has become a PROPOSED permit revision.

An electronic version of this document has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit revision is made by the U.S.EPA within 45 days, the PROPOSED permit revision will become a FINAL permit revision no later than 55 days after the date on which the PROPOSED permit revision was mailed (posted) to U.S.EPA. If U.S.EPA has an objection to the PROPOSED permit revision, the FINAL permit revision will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Tom Cascio at 850/921-9526.

Sincerely,

Trina L. Vielhauer, Chief Bureau of Air Regulation

Zun L Villan

TLV/tbc

Enclosures

Copy furnished to:

Rich Bumar, P.E., Walt Disney World Company Len Kozlov, P.E., Central District Office U.S. EPA, Region 4 (INTERNET e-mail memorandum)

"More Protection, Less Process"

Printed on recycled paper.

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to the Walt Disney Company for the Walt Disney World Resort Complex, located at 1375 Buena Vista Drive, Orange and Osceola Counties, was clerked on August 24, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Orlando Sentinel on September 28, 2004. The DRAFT Title V Air Operation Permit was available for public inspection at the Department of Environmental Protection's Central District Office in Orlando, and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on October 13, 2004.

II. Public Comments.

No comments were received from the applicant or the public at large concerning the DRAFT Title V Permit Revision.

III. Conclusion.

The permitting authority hereby issues PROPOSED Title V Permit Revision No. 0950111-024-AV, with no changes.

Walt Disney World Co. Walt Disney World Resort Complex Facility ID No. 0950111 Orange and Osceola Counties

Title V Air Operation Permit Revision PROPOSED Permit Project No. 0950111-024-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Telephone: 850/488-0114 Fax: 850/922-6979

Compliance Authority:

State of Florida
Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555

Fax: 407/897-2966

Permittee:

Walt Disney World Co. P.O. Box 10,000 Orlando, Florida 32830-1000 PROPOSED Permit No.: 0950111-024-AV

Facility ID No.: 0950111 SIC Nos.: 79, 7996

Project: Title V Air Operation Permit Revision

This permit revision is for the operation of the Walt Disney World Resort Complex. This facility is located at 1375 Buena Vista Drive, Orange and Osceola Counties; UTM Coordinates: Zone 17, 449.70 km East and 3138.00 km North; Latitude: 28° 22' 24" North and Longitude: 81° 32' 46" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-4, TITLE V CONDITIONS (version dated 02/12/02)
APPENDIX SS-1, STACK SAMPLING FACILITIES (dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (dated 10/07/96)
FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSIONS
AND MONITORING SYSTEMS PERFORMANCE REPORT (40 CFR 60, July 1996)
Phase II Acid Rain Application dated 08/05/2002
Alternate Sampling Procedure: ASP Number 97-B-01
Appendix CAM

Effective Date: January 1, 2003

Revision Effective Date:

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Michael G. Cooke, Director Division of Air Resource Management

MGC/tbc

STATEMENT OF BASIS

Walt Disney World Company Walt Disney World Resort Complex

Facility ID. 0950111 Orange and Osecola Counties

Title V Air Operation Permit Revision Permit No. 0950111-024-AV

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. 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.

This Title V Air Operation Permit Revision is for the operation of the Walt Disney World Resort Complex. This facility is located at 1375 Buena Vista Drive, Orange and Osceola Counties; UTM Coordinates: Zone 17, 449.70 km East and 3138.00 km North; Latitude: 28° 22' 24" North and Longitude: 81° 32' 46" West.

The facility is a complex of hotels, theme parks and support facilities, and a utility. The various air pollution sources are boilers, a combined cycle combustion turbine with a natural gas-fired heat recovery steam generator, paint spray booths and associated operations, external combustion oil heaters and hot water heaters.

The Walt Disney World Resort Complex operates 120 stand-by/emergency generators that fire new No. 2 distillate diesel fuel oil (108), natural gas (11), or LP gas (1). Of these generators within the complex, 85 are assigned to the Walt Disney World Co. operations and 35 are assigned to the Reedy Creek Improvement District operations.

The Reedy Creek Energy Services operates a combined cycle combustion turbine (CT) system followed by an associated natural gas-fired duct burner and a heat recovery steam generator (HRSG). It consists of a GE LM 5000 combustion turbine which powers a 38 MW (nominal rating) generator. Nitrogen oxide (NO_x) emissions are controlled by the use of water injection. The HRSG provides steam to power a nominal 8.5 MW steam turbine. The CT can be fired either by natural gas or No. 2 fuel oil. The duct burner can only be fired by natural gas. The compressor inlet air will be conditioned by an evaporative cooler and/or chilled water cooling coils when needed. A catalytic oxidation unit has been placed into service in the ductwork directly following the CT for CO control. Station emergency power will be provided by the Black Start Cummings No. 2 fuel oil fired emergency electric generator (which is exempt from permitting requirements: see Appendix I-1). The Reedy Creek Combined Cycle combustion turbine is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, and Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rules 62-204.800(7)(b)38. & 62-204.800(7)(b)3., F.A.C., respectively; and, PSD-FL-014/014(A)/123, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C. Stack height: 65 feet, exit diameter: 11.1 feet, exit temperature: 285 °F, and, actual volumetric flow rate: 301,777 acfm. This unit began commercial operation April 1989. This emissions unit is also subject to Compliance Assurance Monitoring (CAM) requirements for CO (carbon monoxide).

Carbon Monoxide (CO) is controlled or reduced by the use of a catalytic oxidation system, which is effectively a passive control system. The catalyst (stainless steel foil coated with calcined alumina with platinum metal) enhances the chemical reaction between oxygen and carbon monoxide and forms carbon dioxide as the end product. This reaction is greater than 80% efficient at 392° F (200° C) within minutes of gas turbine startup, before power generation begins. The catalyst normally operates at a temperature around 800° F (427° C) with corresponding CO removal efficiencies above 90%. The carbon monoxide removal efficiency increases as temperature increases up to the maximum operating limit of 1250° F (677° C). (Refer to the attached graph in Figure 1, which illustrates the carbon monoxide conversion efficiency at varying temperatures up to 500° C (932° F). This system is designed and certified by the manufacturer to operate while the plant is burning either natural gas or new No. 2 diesel fuel oil.

A plant operator occupies the plant control room 24 hours per day, which allows the plant personnel to monitor two key catalyst operating parameters. Namely, catalyst inlet temperature and pressure drop across the catalyst bed. A high temperature alarm is in place to alert the operator if the catalyst inlet temperature exceeds 1250° F (677° C) to protect the bed from thermal damage, and a high-pressure alarm sounds if the pressure drop across the catalyst bed exceeds 3" of water column. The pressure reading serves two purposes: to ensure that there is airflow across the bed, thus verifying that the system is operating, and to alert the plant operator if a possible plugging or fouling has occurred.

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are catalyst inlet temperature, pressure drop across the catalyst bed, and annual analysis of a catalyst test plug. The plant operator manually logs the temperature and the pressure drop once a day, monitors the alarms, and takes action if the readings are outside the allowable operating range. The test plug is analyzed annually to enable the catalyst manufacturer to certify the condition of the catalyst.

Thermocouples are located across the inlet to the catalytic oxidizer bed for monitoring the inlet temperature. These monitors/sensors were placed there to protect the catalyst; and, they are tied into an associated alarm system to alert the operator of high temperature readings. The manufacturer did not call for any thermocouples at the back of the catalyst bed, because they are not part of the design criteria for operation. However, there is only six (6) inches of room between the back of the bed and the super heaters; so, to install any of these monitors/sensors would require the removal of the bed.

Since installing the catalytic oxidizer for CO in late 1997, the actual annual CO emissions (based on AOR data) have been 5.09 tons/1998, 4.16 tons/1999, 3.93 tons/2000 and 3.24 tons/2001, which are 4.6%/1998, 3.8%/1999, 3.6%/2000 and 2.9%/2001, respectively, of the allowable standard (110 TPY). By interpolating the actual ton values to 8760 hours and assuming no control, then the values become 133 tons/1998, 113 tons/1999, 115 tons/2000 and 109 tons/2001. In addition, by comparing the differences of these values with the allowable standard, the minimum efficiency of the oxidizer required to meet the standard during these years are 21%/1998, 2.7%/1999, 4.5%/2000 and 0.0%/2001; and, another way of looking at these values is

Walt Disney World Company Permit No. 0950111-024-AV

to access the number of days that the catalytic oxidizer would have had to operate to meet the standard during these years, which would be 77 days/1998, 10 days/1999, 16.5 days/2000, and none for 2001. Because of the high removal efficiencies, even during start-up, it is obvious that the allowable standard is easily met by just operating the catalytic oxidizer; and, if one only looks at the data from the 2001 operation, CAM would not be required.

The North Service Area Laundry consists of three (3) laundry boilers (Nos. 1, 2 & 3), which are manufactured by York-Shipley. Nos. 1 and 2 are rated at 300 horsepower (HP) and No. 3 is rated at 350 HP. The combined maximum total heat input of the three boilers is 39.6 MMBtu/hr from the firing of natural gas only. The laundry boilers are subject to 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; and, they are regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators With Less Than 250 MMBtu Per Hour Heat Input.

Disney's Boardwalk Resort has two (2) boilers (Nos. BDW-1 & 2), which are manufactured by Cleaver Brooks, Model Nos. CBE-700-250. The boilers are each rated at 250 HP. The maximum heat input of each boiler is 10.46 MMBtu/hr from the firing of natural gas only. The boilers are subject to 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; and, they are regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators With Less Than 250 MMBtu Per Hour Heat Input.

The Reedy Creek Improvement District's Epcot Central Energy Plant has two (2) identical 3,600 horsepower large bore diesel engines (Nos. Epcot DG-1 & 2), manufactured by Stewart & Stevenson, Model Nos. S-20-645-E4B. Each engine is equipped with a 2.5 megawatt generator, Model TBGZHJ. Each generator provides peak demand reduction and emergency standby power. Each emissions unit is permitted to fire new No. 2 distillate fuel oil only. The sulfur content of the new No. 2 distillate fuel oil shall not exceed 0.5%, by weight. The firing of low sulfur fuel oil negates the need to conduct any SO₂ mass tests. Each emissions unit is allowed to operate 1900 hrs/yr.

At the North Service Area Dry Cleaning Plant, there is one perchloroethylene dry cleaning unit (No. 1). No. 1 is a Multimatic Atlas 45. The perchloroethylene dry cleaning unit is vented to a single exhaust stack with precleaning provided by a new chiller system followed by and in series with an existing carbon absorption system (an American Laundry Machinery, Inc.: Model PC 212 activated carbon vapor adsorber). The permittee recently upgraded the existing control system by installing a chiller system, which reduced the potential perchloroethylene emissions (1.5 TPY to 0.5 TPY) and load on the existing carbon absorption system. The perchloroethylene dry cleaning operation is subject to 40 CFR 63, Subpart M, National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.

At Disney's Animal Kingdom, specifically at the Necropsy Building, there is an animal crematory, a Crawford Model CD800 Animal Carcass Incinerator. This emissions unit is subject to the permitting

requirements of Rule 62-296.401(1), F.A.C., Incinerators with a Charging Rate Less Than 50 Tons Per Day. The emissions unit's processing capacity shall not exceed 800 lbs per four-hour period (equivalent to 200 lbs/hr); and, the emissions unit's maximum heat input shall not exceed 3.0 MMBtu/hr while firing only natural gas. The emissions unit is allowed to operate continuously, i.e., 8760 hours per year. The design of the secondary chamber combustion zone shall be such that it has a minimum residence time of 1.0 seconds at 1800 degrees Fahrenheit (°F).

The actual operating temperature of the secondary chamber combustion zone shall be no less than 1600 °F throughout the combustion process in the primary chamber. Cremation in the primary chamber shall not begin unless the secondary chamber combustion zone temperature is equal to or greater than 1600 °F.

The crematory unit is permitted to incinerate only dead animals and, if applicable, the bedding and the remains associated with the animals placed in leak-proof containers. Containers may contain up to 0.5 percent by weight chlorinated plastics. Plastic bags used for the incineration of animals shall be nonchlorinated and no less than 3 mils thick. If containers are incinerated, documentation from the manufacturers certifying that they are composed of 0.5 percent or less by weight chlorinated plastics must be kept on-file at the site for the duration of their use and for at least five years after their use. This documentation must also be submitted with any application for renewal air operation permit. This emissions unit is not permitted to cremate dead animals which were used for medical or commercial experimentation. No other material, including biomedical waste* as defined in Rule 62-210.200, F.A.C. (see below), shall be incinerated.

- * "Biomedical Waste": Any solid waste or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and, discarded sharps. The following are also included:
- (a) Used absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and, absorbent materials saturated with blood or blood products that have dried.
- (b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids, or secretions or excretions visibly contaminated with blood, but have not been treated by a method listed in Section 381.0098, F.S., or a method approved pursuant to Rule 64E-16, F.A.C.

Operators of the incinerator were trained by the equipment manufacturer's representatives. The content of the training program was submitted to the Department of Environmental Protection's Bureau of Air Regulation and approved, which met the criteria applicable to cremation set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook, EPA 453/B-93-018, and Instructor's Guide, EPA 453/B-93-019. A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program was submitted to the Department within 15 days of training; and, the owner of any new crematory units shall submit copies of the operator certificates within 15 days after completion of the initial compliance test pursuant to the unit's construction permit. An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional five years after termination of employment.

Also included in this permit are miscellaneous unregulated (paint spray booths, etc.) and insignificant emissions units/activities.

Based on the Title V permit application received July 8, 2002, this facility is a major source of hazardous air pollutants (HAPs).

This permit revision includes the following changes:

- Three existing diesel electric generators serving the DISC building at the Walt Disney World Complex are reclassified from insignificant status to regulated status.
- A new Subsection F is added to the Title V permit that includes the following description and specific conditions:

Subsection F. This section addresses the following emissions unit.

E.U. ID No./Facility ID No.	Brief Description
-120	Three Diesel Electric Generators Serving the DISC
	Building

Both the annual fuel quantity used and percent sulfur, by weight, in the fuel oil are limited for this emissions unit. The nameplate rating of each generator is 1.75 megawatts (MW). The manufacturer is Spectrum Detroit Diesel. The model number is 1750DS-4. The generators were installed in November, 2002, with initial plans to operate them only as conditionally exempt emergency generators. Diesel fuel for the generators is stored in three 10,000 gallon fuel tanks. Air Construction Permit 0950111-022-AC reclassified the unit to regulated status, allowing increased operational flexibility for the facility.

Operational Requirements

F.1. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment.

[Rule 62-4.070(3), F.A.C.; and 0950111-023-AC, Specific Condition A.11.]

F.2. Methods of Operation. Fuels. The only fuel allowed to be burned in this emissions unit is diesel fuel oil, with a maximum sulfur content of 0.5%, by weight. The amount of diesel fuel fired in the unit shall not exceed 225,000 gallons per year.

[Rule 62-4.070(3), F.A.C.; and 0950111-023-AC, Specific Condition A.12.]

Testing, Compliance Determination, and Reporting

- **F.3.** Sulfur Dioxide. The permittee shall demonstrate compliance with the diesel fuel sulfur limit via a fuel analysis provided by the vendor or permittee upon each fuel delivery to the emission unit's three 10,000 gallon diesel fuel tanks.
 - The fuel sulfur content, in percent by weight, for the diesel fuel shall be evaluated using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95, or the latest editions.

{Permitting note: Evaluation of the fuel sulfur content required by this specific condition may be provided by using the fuel vendor's bill of lading for each fuel delivery.} [Rules 62-4.070(3), 62-213.440 and 62-297.440, F.A.C.; and 0950111-023-AC, Specific Condition A.14.]

- **F.4.** Recordkeeping. The following records shall be kept at the facility:
 - Total gallons of diesel fuel oil used during each month for the three generators.
 - The sulfur content, in percent by weight, of all the diesel fuel delivered each month to the three 10,000 gallon tanks, based on the vendor or permittee provided fuel sample analyses. See Specific Condition **F.3**.

The records shall be maintained for a minimum of 5 years and made available to the Central District Office upon request.

[Rule 62-297.310(8), F.A.C.; and 0950111-023-AC, Specific Condition A.15.]

Title V Air Operation Permit Revision 0950111-024-AV

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Section I. Facility Information.

Subsection A. Facility Description.

The facility is a complex of hotels, theme parks and support facilities, and a utility. The various air pollution sources are boilers, a combined cycle combustion turbine with a natural gas-fired heat recovery steam generator, paint spray booths and associated operations, external combustion (thermal) oil heaters and hot water heaters.

Based on the Title V permit renewal application received July 8, 2002, this facility is a major source of hazardous air pollutants (HAPs).

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

E.U. ID No. (Facility ID No.)	Brief Description	
North Service Area Dry Cleaning Plant		
-001 (LDC-1)	Dry Cleaning Unit #1	
North Service Area (NSA)		
-005 (NSA-17)	North Service Area (NSA) Central Shops Building Annex	
, , ,	(CSBA): Sand Blast Chamber No. 1: unregulated	
-006 (NSA-18)	NSA Boat Maintenance & Painting Facility	
-007 (NSA-1 thru 7, 11, 12, 14 thru 16)	NSA Central Shops Building	
-014 (NSA-8)	NSA Lofting Building PSB	
-015 (NSA-9 & 10)	NSA CSBA	
-020 (LBB-1a)	Laundry Boiler #1	
-021 (LBB-1b)	Laundry Boiler #2	
-022 (LBB-1c)	Laundry Boiler #3	
Disney's Grand Floridian Hotel		
-035 (GFR2 thru 18)	16 Hot Water Heaters	
Disney-MGM Studios		
-053 (STB-1, 2A, 2B1, 2B2, 3 thru 8)	10 Hot Water Heaters	
Disney-MGM Studio Tours		
-061 (MGM-10)	Paint Spray Booth (PSB)	
Buena Vista Construction		
-062 (BVC-1)	PSB	
Lake Buena Vista Community Village		
-063 (LBV-1 & 2)	PSBs	
Disney Village		
-065 (VM-3)	PSB	
Ft. Wilderness/Golf Course	DOD	
-066 (FWR-4)	PSB	
Yacht & Beach Club	DCD	
-067 (YBC-3)	PSB	
EPCOT Center	DCD-	
-068 (EP-1 & 2)	PSBs PSB	
-070 (EP-3)	rod	
South Service Area	PSB	
-071 (SSA-1)	rod	

E.U. ID No. (Facility ID No.)	Brief Description
Administrative Area	
-072 (LAU-1 & 2)	2 Laundry Thermal Oil Heaters
Magic Kingdom	·
-075 (MK-1)	PSB
Reedy Creek Improvement District/Epcot	
-076 (Epcot HWG-1 thru 3)	3 Hot Water Heaters (unregulated)
-079 (Epcot DG-1)	2.5 MW Diesel Generator
-080 (Epcot DG-2)	2.5 MW Diesel Generator
Reedy Creek Improvement District	
-081 (CEP-2)	Hot Water Heater
Blizzard Beach	
-083 (BB-1 thru 5)	5 Hot Water Heaters
Reedy Creek Improvement District	
-088 (CEP-1)	CCCT with natural gas fired Heat Recovery Steam
, , ,	Generator
Boardwalk Resort	
-090 (BDW-1 & 2)	2 Boilers
-091 (BDW-3 thru 10)	8 Hot Water Heaters
Magic Kingdom	
-092 (MK-3)	Hot Water Heater
-093 (MK-2)	PSB
Boardwalk Resort	
-094 (BR-1)	PSB
Coronado Springs Resort	
-095 (COS-1 thru 37)	37 Hot Water Heaters
Stand-by/Emergency Generators	
-101	120 Stand-by/Emergency Generators Firing #2 FO, NG or
	LP Gas
Coronado Springs Resort	
-102 (COS-41)	PSB
Disney's Animal Kingdom	
-103 (DAKU-1 thru 51)	51 Hot Water Heaters
Necropsy Building	
-112 (DAK-1)	Crawford Model CB800 Animal Crematory
All Star Resort	
-113 (ASR-2 thru 108)	107 Hot Water Heaters
-114 (ASR-1)	PSB
Tree of Life Boiler	
-115 (DAKU-52)	1.075 MMBtu/hr boiler firing NG
Disney's MGM Studios Feature Animation	11000
Building	
-117	2 PSBs
NSA Monorail Building	
-118 (NSA-20)	Monorail Trains PSB
Disney's Animal Kingdom	A A WARM A WAR
-119	Maintenance PSB
-120	Three Diesel Electric Generators Serving the DISC Building
-120	I mee Dieser Dieenie Generators gerving die Dise Building

Unregulated Emissions Units and/or Activities

{Permitting note: For Unregulated Emissions Units and/or Activities, see Appendix U-1.}

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 provided to the permittee for information purposes only: Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers Statement of Basis

These documents are on file with the permitting authority:

Title V Permit Renewal issued on December 31, 2002. Title V Permit Revision Application received on June 23, 2004.

DRAFT Title V Permit Revision clerked on August 24, 2004.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit. {Permitting Note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall 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.; AC48-151472; AC48-151504; AC48-151506; AC48-151507; AC48-151509; AC48-151510; AC48-156346; AC48-166499; AC48-179648; AC48-179649; AC48-205018; AC48-243981; and, AO48-183381]

3. 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.

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- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 1515

Lanham-Seabrook, Maryland 20703-1515

Telephone: 301/429-5018

and,

- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
- 5. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> 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.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person 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 the Department.

{Permitting Note: Nothing was deemed necessary and ordered at this time.}

[Rule 62-296.320(1)(a), F.A.C.]

- 8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility during operations include: chemical or water application to unpaved roads, unpaved yard areas, and storage piles; paving and maintenance of roads, parking areas and plant grounds; landscaping and planting of vegetation; confining abrasive blasting where possible; and other techniques, as necessary. Also, for the solid waste disposal area, wetting agents shall be applied. [Rule 62-296.320(4)(c)2., F.A.C
- 9. When appropriate, any recording, 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.]
- 10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District office at the following address:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-2966

11. 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: 404/562-9155

Fax: 404/562-9163

12. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

13. 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. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

Miscellaneous

14. There shall be no discharges of liquid effluents or contaminated runoff to surface or ground water without approval from the Department.

[0950111-005-AV]

Section III. Emissions Units.

Subsection A. This section addresses the following emissions unit.

E.U. ID No./Facility ID No.	Brief Description
-088/CEP-1	Combined Cycle Combustion Turbine with a Natural Gas-
	Fired Duct Burner-Heat Recovery Steam Generator

This emissions unit is a combined cycle combustion turbine (CT) system followed by a natural gas-fired duct burner and a heat recovery steam generator (HRSG). It consists of a GE LM 5000 combustion turbine which powers a 38 MW (nominal rating) generator. Nitrogen oxide (NO_X) emissions are controlled by the use of water injection. The HRSG provides steam to power a nominal 8.5 MW steam turbine. The CT can be fired either by natural gas or No. 2 fuel oil. The duct burner can only be fired by natural gas. The compressor inlet air is conditioned by an evaporative cooler and/or chilled water cooling coils when needed. A catalytic oxidation unit has been placed into service in the ductwork directly following the CT for CO control. Station emergency power will be provided by the Black Start Cummings No. 2 fuel oil fired emergency electric generator (which is exempt from permitting requirements: see Appendix I-1).

{Permitting Notes: The emissions unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, and Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rules 62-204.800(7)(b)38. & 62-204.800(7)(b)3., F.A.C., respectively; and, PSD-FL-014/014(A)/123, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C. Stack height: 65 feet, exit diameter: 11.1 feet, exit temperature: 285 °F, and, actual volumetric flow rate: 301,777 acfm. Commercial operation began in April 1989.}

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

Essential Potential to Emit (PTE) Parameters

[Permitting Note: Unless stated so, the following conditions apply to both the CT and HRSG.]

General

- A.1. <u>Definitions</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]
- A.2. <u>Circumvention</u>. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

 [40 CFR 60.12]

A.3. <u>Modifications</u>. Except as provided under 40 CFR 60.14(e) and (f), 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 11 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.

[40 CFR 60.14(a)]

Essential Potential to Emit (PTE) Parameters

A.4. <u>Permitted Capacity</u>. The maximum heat input to the Combustion Turbine (CT) and the duct burner, combined, shall not exceed 450 MMBtu/hr (normal duct burner heat input rate of 23 MMBtu/hr). When the CT is not in operation, the duct burner heat input rate shall not exceed 198 MMBtu/hr.

{Permitting Note: The heat input limitation has been placed in the permit to identify the capacity of the emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; 40 CFR 60.332(b); and, 0950111-005-AV]

A.5. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.49. [Rule 62-297.310(2), F.A.C.]

A.6. Methods of Operation - Fuels.

- a. Natural gas shall be the primary fuel fired in the CT. New No. 2 distillate fuel oil may be fired as "back-up" fuel in the CT, only. Only natural gas shall be fired in the duct burner. The burning of other fuels requires review, public notice, and approval through the preconstruction process (Chapters 62-210 and 62-212, F.A.C.).
- b. New No. 2 distillate fuel oil can be used as a backup fuel in the CT, only, for a maximum of 336 hours per year.

[Rule 62-213.410, F.A.C.; and, 0950111-005-AV]

A.7. <u>Hours of Operation</u>. This emissions unit may operate continuously, i.e., 8760 hours per year.

[Rule 62-210.200(PTE), F.A.C.; 0950111-005-AV]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. A.8., A.9., A.11., A.12, and A.14. thru A.21., are based on the specified averaging time of the applicable test method.}

A.8. <u>Nitrogen Oxides</u>. Nitrogen oxides emissions, expressed as NO_X, shall not exceed 82 ppm by volume at 15 percent oxygen and on a dry basis (132 lbs/hr) during conditions of peak loading (based on 40°F), or 68 ppm by volume at 15 percent oxygen and on a dry basis (100

lbs/hr) for a 12-month rolling average, or 17 tons per year, while burning new No. 2 distillate fuel oil. The 12-month rolling average emissions will be calculated using hourly averages during the month and then using consecutive monthly averages to obtain an annual average. The Department may alter this averaging method after due consideration of alternative compliance plans.

[0950111-005-AV]

- A.9. Nitrogen Oxides. Nitrogen oxides emissions, expressed as NO_X, shall not exceed 74 ppm by volume at 15 percent oxygen and on a dry basis (112 lbs/hr) during conditions of peak loading (based on 40°F), or 58 ppm by volume at 15 percent oxygen and on a dry basis (77 lbs/hr) for a 12-month rolling average, or 280 tons per year, while burning natural gas. The 12-month rolling average emissions will be calculated using hourly averages of the combustion turbine and duct burner combined during the month and then using consecutive monthly averages to obtain an annual average. The Department may alter this averaging method after due consideration of alternative compliance plans. The duct burner NO_X emissions shall not exceed 4.6 lbs/hr at 23 MMBtu/hr heat input (corresponding to 0.20 lb/MMBtu) or 40 lbs/hr at 198 MMBtu/hr heat input (corresponding to 0.20 lb/MMBtu). The nitrogen oxides emissions standard apply at all times including periods of startup, shutdown, or malfunction.

 [40 CFR 60.44b(a)(4), (h) & (i); and, 0950111-001-AC]
- A.10. <u>Nitrogen Oxides</u>. Nitrogen oxides from the CT shall be controlled by water injection at a minimum of 0.6/1.0 water-to-fuel ratio (Reedy Creek Improvement District (RCID) will provide data from compliance tests in order to allow the Department to set a final water injection-to-fuel ratio in order to optimize pollution control and meet the permitted emission limits.). [0950111-005-AV]
- A.11. <u>Sulfur Dioxide</u>. Sulfur dioxide emissions shall not exceed 58 ppm by volume at 15 percent oxygen and on a dry basis. The maximum allowed sulfur dioxide emissions shall not exceed 118 lbs/hr nor 20 tons per year, while burning new No. 2 distillate fuel oil. [40 CFR 60.333(a); and, 0950111-005-AV]
- A.12. <u>Sulfur Dioxide</u>. The maximum allowed sulfur dioxide emissions shall not exceed 1.2 lbs/hr nor 5.1 tons per year, while burning natural gas. [0950111-005-AV]
- A.13. <u>Sulfur Dioxide Sulfur Content</u>. The sulfur content of the fuel oil fired by the stationary gas turbine may be used to determine compliance with 40 CFR 60.333(a). Under such circumstances, the permittee shall not fire in any stationary gas turbine any fuel which contains a sulfur content in excess of 0.4 percent, by weight.

 [40 CFR 60.333(b); and, 0950111-005-AV]
- A.14. <u>Particulate Matter</u>. Particulate matter shall not exceed 9 lbs/hr nor 2 tons per year, while burning new No. 2 distillate fuel oil. [0950111-005-AV]
- A.15. <u>Particulate Matter</u>. Particulate matter shall not exceed 0.8 lbs/hr nor 3.5 tons per year, while burning natural gas. [0950111-005-AV]

- A.16. <u>Carbon Monoxide</u>. Carbon monoxide emissions shall not exceed 24 lbs/hr nor 4 tons per year, while burning new No. 2 distillate fuel oil. [0950111-005-AV]
- A.17. <u>Carbon Monoxide</u>. Carbon monoxide emissions shall not exceed 25 lbs/hr nor 110 tons per year, while burning natural gas. [0950111-005-AV]
- A.18. <u>Volatile Organic Compounds (VOCs)</u>. VOC emissions shall not exceed 6 lbs/hr nor 1 ton per year, while burning new No. 2 distillate fuel oil. [0950111-005-AV]
- A.19. <u>Volatile Organic Compounds (VOCs)</u>. VOC emissions shall not exceed 6 lbs/hr nor 26 tons per year, while burning natural gas.

 [0950111-005-AV]
- A.20. <u>Visible Emissions</u>. Visible emissions shall not exceed 10 percent opacity while burning new No. 2 distillate fuel oil. [0950111-005-AV]
- A.21. <u>Visible Emissions</u>. Visible emissions shall not exceed 5 percent opacity while burning natural gas.

 [0950111-005-AV]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

- A.22. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- A.23. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

 [Rule 62-210.700(4), F.A.C.]
- A.24. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]

- A.25. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
- (1). Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load during the period of excess emissions. There is no appreciable amount of fuel bound nitrogen in the natural gas.

 [40 CFR 60.334(c)(1)]

Monitoring of Operations

- A.26. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- A.27. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG, and using water injection to control NOx emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.

 [40 CFR 60.334(a)]
- A.28. The following custom fuel monitoring schedule shall be used at this facility:

Custom Fuel Moditoring Schedule for Natural Gas

- (1) Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel being fired in the gas turbine (CT).
- (2) Sulfur Monitoring:
 - (a) Analysis for sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The approved methods are ASTM D1072-80, ASTM D3030-81, ASTM D3246-83, and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2), or the latest edition(s).
 - (b) Effective the date of this custom schedule, sulfur monitoring shall be conducted at least once per calendar quarter. Sulfur analyses results shall be reported in units of grains of sulfur per 100 cubic feet of natural gas and shall be submitted with the quarterly excess emissions report required by 40 CFR 60.7. (EPA's letter dated June 15, 1994).
 - (c) The sulfur content of the fuel shall also be expressed as maximum sulfur dioxide emissions (lbs/hr) and shall be consistent with the limits specified in Specific Condition 5 of permit AC48-137740 (see specific conditions A.11. & A.12. of this permit).

- (d) Should any sulfur analysis as required in items (2)(b), above, indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- (3) If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- (4) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of (five) years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

Custom Fuel Monitoring Schedule for Liquid Fuel

(1) Sulfur and nitrogen content of the liquid fuel:

Upon delivery of the fuel, a sample shall be randomly taken from one compartment of each truck and composited for analysis (for verification of the vendor data) by a third party laboratory using, ASTM Method D-3228 for nitrogen analysis, and ASTM Method D-4294 for sulfur analysis.

[40 CFR 60.334(b)(2); and, 0950111-005-AV]

- A.29. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG, shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
- (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) & (2)]

A.30. The owner or operator of an affected facility (HRSG) which is subject to the nitrogen oxides standards of 40 CFR 60.44b(a)(4) is not required to install or operate a continuous monitoring system to measure nitrogen oxides emissions. See specific condition A.9. [40 CFR 60.48b(h)]

A.31. Determination of Process Variables.

(a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) <u>Accuracy of Equipment</u>. Equipment 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.

[Rule 62-297.310(5), F.A.C.]

Continuous Monitoring Requirements

- A.32. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]
- A.33. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. For CMS other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of CMS breakdowns, repairs, calibration checks, and zero span adjustments shall not be included in the data averages computed under this paragraph.

 [40 CFR 60.13(f) and 60.13(h)]

Compliance Assurance Monitoring (CAM) Requirements

A.34. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Test Methods and Procedures

A.35. Subsequent to the initial test, annual stack testing for CO emissions at full capacity load conditions shall be performed according to an annual test protocol developed jointly by RCID and FDEP. This protocol will specify the test methods and procedures to be used during the annual compliance testing. Using the established procedures of this protocol as a guide, simultaneous testing full capacity load conditions shall be conducted for CO, NO_X and VE. EPA Method 10 shall be used for CO, EPA Method 7E or 20 shall be used for NO_X, and EPA Method 9 shall be used for VE. Testing at other loads will not be necessary if the unit is shown to be in compliance with the applicable emission standards for NO_X and CO. The test methods shall be in accordance with Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. [40 CFR 60.44b(a); Rules 62-213.440 and 62-297.401, F.A.C.; and, 0950111-005-AV]

- A.36. <u>Nitrogen Oxides</u>. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

 [40 CFR 60.335(a)]
- A.37. <u>Nitrogen Oxides</u>. The owner or operator shall determine compliance with the nitrogen oxides NSPS standard in 40 CFR 60.332 as follows:
- (1) The nitrogen oxides emission rate (NO_X) shall be computed for each run using the following equation:

$$NO_x = (NO_{x0}) (Pr/Po)^{0.5} e^{19(Ho-0.00633)} (288^{\circ}K/Ta)^{1.53}$$

where:

 NO_X = emission rate of NO_X at 15 percent O_2 and ISO standard ambient conditions, volume percent.

 NO_{XO} = observed NO_{X} concentration, ppm by volume.

 P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

 P_0 = observed combustor inlet absolute pressure at test, mm Hg.

 H_0 = observed humidity of ambient air, g H_2O/g air.

e = transcendental constant, 2.718.

 T_a = ambient temperature, °K.

[40 CFR 60.335(c)(1)]

A.38. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_X standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations.

{Permitting Note: The initial compliance test and all subsequent annual compliance tests determine the proper water-to-fuel ratio (W/F ratio), the continuous monitoring system (CMS) does not. In addition to other information, the CMS records the average W/F ratio hourly to demonstrate the minimum W/F ratio is maintained. The equation in specific condition A.37. will be used for load corrections to ISO conditions in place of equations supplied by the manufacturer.}

[40 CFR 60.335(c)(2)]

- A.39. <u>Nitrogen Oxides and Sulfur Dioxide</u>. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:
- (3). EPA Method 7E or 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides; and, EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the sulfur dioxide and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_X emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

[40 CFR 60.335(c)(3); and, 0950110-002-AC]

- A.40. <u>Sulfur Dioxide Sulfur Content</u>. The owner or operator shall determine compliance with the sulfur content standard of 0.4 percent, by weight, as follows: ASTM D 2880-96 (which includes ASTM D 4294), or the latest edition, shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, D 3246-92, or the latest edition, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. [40 CFR 60.335(d) and 60.17]
- A.41. Nitrogen and Sulfur Contents. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

 [40 CFR 60.335(e)]
- A.42. <u>Carbon Monoxide</u>. EPA Method 10 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A, shall be used to determine compliance with the carbon monoxide standards in specific conditions **A.16**. & **A.17**.
- A.43. <u>Visible Emissions</u>. EPA Method 9 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A, shall be used to determine compliance with the visible emissions standard in specific conditions **A.20**. & **A.21**. [Rule 62-297.401, F.A.C.; and, 40 CFR 60, Appendix A]
- A.44. Opacity. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

A.45. 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.

[40 CFR 60.8(c)]

A.46. The owner or operator shall provide, or cause to be provided, stack sampling and performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facilities.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)(1), (2), (3) & (4); and, 0950111-005-AV]

A.47. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]

A.48. Required Number of Test Runs. 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 emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.49. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(a), F.A.C.]

A.50. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.51. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached). [Rule 62-297.310(4), F.A.C.]
- A.52. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit 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. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or,
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;

- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and, c. Each NESHAP pollutant, if there is an applicable emission standard.
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit 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 matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]
- A.53. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or,
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or,
- c. only liquid fuel(s) for less than 400 hours per year. [Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

A.54. To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption and hourly usage for the turbine and the average heating value for the fuel oil. Average fuel oil heating rate shall be the calendar year annual average higher heating value of No. 2 fuel oil purchased for the permittee's bulk fuel oil storage facility. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request. [Rule 62-213.440, F.A.C.]

- A.55. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
- (4) A notification of any <u>physical or operational change</u> 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 40 CFR 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.

 [40 CFR 60.7(a)(4)]
- A.56. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

 [40 CFR 60.7(b)]
- A.57. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(2), (3), & (4)]
- A.58. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted. [40 CFR 60.7(d)(1) & (2)]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)

- A.59. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and,
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2). The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) & (e)(2).

 [40 CFR 60.7(e)(1)]

- A.60. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.61. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

A.62. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.

- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

- A.63. Reports under 40 CFR 60.7(c) are required for periods of NO_X excess emissions, which are defined in specific condition **A.25**. [40 CFR 60.334(c)(1)]
- A.64. Submit a quarterly report for each emissions unit for the following within 30 days at the end of each quarter:
- a. Total hours of operation.
- b. Per 40 CFR 60.334(c)(1) for NO_X, any one hour period in which the water to fuel ratio falls below 0.6/1.0 or the value determined during the latest compliance tests of modification 0950111-002-AC, whichever is the larger numerical fraction. [Rule 62-213.400, F.A.C.; and, 0950111-005-AV]
- A.65. <u>HRSG</u>. The owner or operator of an affected facility (HRSG) subject to the nitrogen oxides standards under 40 CFR 60.44b shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date.
- [40 CFR 60.49b(g)(1)]

Section III. Emissions Units.

Subsection B. This section addresses the following emissions units.

E.U./Facility I.D.	Brief Description	Manufacturer	Model
North Service Area Laundry			
-020/LBB-1a	Laundry Boiler #1	York-Shipley	300HP
-021/LBB-1b	Laundry Boiler #2	York-Shipley	300HP
-022/LBB-1c	Laundry Boiler #3	York-Shipley	350HP
Disney's Boardwalk Resort			
-090/BDW-1	Boiler	Cleaver Brooks	CBE-700-250
-090/BDW-2	Boiler	Cleaver Brooks	CBE-700-250

{Permitting Notes: The laundry boilers are subject to 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; and, the other boilers are regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators With Less Than 250 MMBtu Per Hour Heat Input.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation rates are as follows:

E.U./Facility I.D.	Brief Description	Permitted Capacity	
North Service Area Laundry			
		MMBtu/hr Heat Input	
-020/LBB-1a	Laundry Boiler #1	39.6 (total: #1, #2 & #3)	
-021/LBB-1b	Laundry Boiler #2	39.6 (total: #1, #2 & #3)	
-022/LBB-1c	Laundry Boiler #3	39.6 (total: #1, #2 & #3)	
Disney's Boardwalk Resort			
		MMBtu/hr Heat Input	
-090/BDW-1	Boiler	10.46	
-090/BDW-2	Boiler	10.46	

{Permitting Note: The heat input limitation has been placed in the permit to identify the capacity of the emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rule 62-210.200(PTE); AC48-271849; and, 0950111-005-AV]

- B.2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition **B.11**. [Rule 62-297.310(2), F.A.C.; and, 0950111-005-AV]
- B.3. Methods of Operation Fuels. For the North Service Area Laundry and Disney's Boardwalk Resort boilers, the only fuel allowed to be fired is natural gas. [Rules 62-296.406(2) & (3), F.A.C.; AC48-271849; and, 0950111-005-AV]
- B.4. <u>Hours of Operation</u>. The emissions units may operate continuously, i.e., 8760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, 0950111-005-AV]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging time for Specific Condition **B.5.** is based on the specified averaging time of the applicable test method.}

- B.5. Visible Emissions. See Specific Condition **B.10**.
- a. Visible emissions from each laundry boiler shall not exceed 5% opacity.
- b. Visible emissions from each Boardwalk Resort boiler shall not exceed 20% opacity, except for one 6-minute period per hour during which opacity shall not exceed 27%. [Rules 62-296.406(1) and 62-296.320(4)(b)1., F.A.C.; AC48-271849; and, 0950111-005-AV]
- B.6. <u>Particulate Matter and Sulfur Dioxide</u>. From the steam boilers, particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas. [Rule 62-296.406(2) & (3), F.A.C.; and, 0950111-005-AV]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

- B.7. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- B.8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

- B.9. Determination of Process Variables.
- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment 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.

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

- B.10. <u>Visible emissions</u>. See specific condition **B.5.**
- a. For the laundry boilers, the diesel electric generators, and the Boardwalk Resort boilers, the test method shall be EPA Method 9, in accordance with Chapter 62-297, F.A.C.

- b. The visible emissions shall be conducted for 60-minutes for each boiler. [Rules 62-213.440, 62-296.320(4)(b)4., and 62-297.401, F.A.C.; and, 0950111-005-AV]
- B.11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

B.12. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- B.13. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit 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. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard (see specific condition **B.14.**);
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit 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 matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]
- B.14. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning (see specific condition **B.13.(a)4.a.**):
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year. [Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

B.15. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

B.16. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]
- B.17. For each emissions unit, the permittee shall maintain a monthly log of the hours operated and the amount of fuel fired.

[Rules 62-4.070 and 62-213.440, F.A.C.; and, 0950111-005-AV]

B.18. The type of fuel and the heat input to each emissions unit shall be included on the visible emissions test report.

[Rule 62-213.440, F.A.C.; and, 0950111-005-AV]

Walt Disney World Co.
Walt Disney World Resort Complex

B.19. The owner or operator of each affected emissions unit (laundry boilers) shall record and maintain records of the amounts of natural gas combusted during each day. The records shall be retained for a period of at least five years following the date of such record.

[40 CFR 60.48c(g) & (h); and, Rule 62-213.440, F.A.C.]

Section III. Emissions Units.

Subsection C. This section addresses the following emissions units.

E.U./Facility I.D.	Brief Description	Manufacturer	Model		
EPOCH Central Energy	EPOCH Central Energy Plant				
-079/(EPCOT DG-1)	Diesel Electric Generator #1 (2.5 MW)	Stewart & Stevenson	S-20-645-E4B		
-080/(EPCOT DG-2)	Diesel Electric Generator #2 (2.5 MW)	Stewart & Stevenson	S-20-645-E4B		

These emissions units are identical 3,600 horsepower large bore diesel engines, with each one equipped with a 2.5 megawatt generator, Model TBGZHJ. Each generator provides peak demand reduction and emergency standby power. Each emissions unit is permitted to fire new No. 2 distillate fuel oil only.

[Permitting Notes: The diesel electric generators were issued permits pursuant to Rule 62-210.300, Permits Required.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

C.1. <u>Permitted Capacity</u>. The maximum operation rates are as follows:

E.U./Facility I.D.	Brief Description	Permitted Capacity
Reedy Creek Improvement District		megawatts/hr
-079/(EPCOT DG-1)	Diesel Electric Generator #1 (2.5 MW)	2.5
-080/(EPCOT DG-2)	Diesel Electric Generator #2 (2.5 MW)	2.5

{Permitting Note: The megawatt limitation has been placed in the permit to identify the capacity of the emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rule 62-210.200(PTE), F.A.C.; and, 0950111-005-AV]

- C.2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition **C.18**. [Rule 62-297.310(2), F.A.C.]
- C.3. <u>Methods of Operation Fuels</u>. The only fuel allowed to be fired is new No. 2 distillate fuel oil.

[Rule 62-213.410, F.A.C.; and, 0950111-005-AV]

C.4. <u>Hours of Operation</u>. Each emissions unit is allowed to operate 1900 hrs/yr. [Rule 62-210.200(PTE), F.A.C.; and, 0950111-005-AV]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions C.5. and C.6. are based on the specified averaging time of the applicable test method.}

C.5. Visible Emissions.

- a. Visible emissions from each diesel electric generator shall be less than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.; and, 0950111-016-AC]
- C.6. The allowable pollutant emissions from each diesel electric generator shall not exceed the following:

Pollutant	lbs/hr	TPY
Particulate Matter	10.0	9.5
Sulfur Dioxide	14.5	14.0
Nitrogen Oxides	126.0	126.0
Carbon Monoxide	2.9	2.8
Volatile Organic Compounds	2.1	2.0

[0950111-005-AV]

C.7. <u>Sulfur Dioxide - Sulfur Content</u>. The sulfur content of the new No. 2 distillate fuel oil shall not exceed 0.5%, by weight. Firing low sulfur fuel oil negates the need to conduct any SO₂ mass tests. See Specific Conditions **C.11.** and **C.15**. [0950111-005-AV]

Excess Emissions

- C.8. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- C.9. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

 [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

C.10. Determination of Process Variables.

(a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment 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.

[Rule 62-297.310(5), F.A.C.]

C.11. Monitoring - Fuel Oil. The fuel oil shall be analyzed each time fuel oil is transferred to the storage tank. In lieu of conducting sampling and analysis at the time of each delivery of new fuel oil, the permittee can accept a fuel oil analysis from the vendor upon each delivery and the records shall be retained for a minimum of 5 years. See specific conditions C.7. and C.15. [Rule 62-213.440, F.A.C.; and, 0950111-005-AV]

Test Methods and Procedures

- C.12. <u>Visible emissions</u>.
- a. For the diesel electric generators, the test method shall be EPA Method 9 in accordance with Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)4. and 62-297.401, F.A.C.; and, 0950111-005-AV]

- C.13. <u>Particulate Matter</u>. EPA Method 5 shall be used to demonstrate compliance with particulate matter emissions limit in accordance with Chapter 62-297, F.A.C., if the visible emissions are equal to or greater than 20% opacity. If a test is required, then a visible emissions test shall be conducted concurrently with each particulate matter emissions test. [Rule 62-297.401, F.A.C.; and, 0950111-005-AV]
- C.14. <u>Nitrogen Oxides</u> (NO_X). Annually, EPA Method 20 shall be used to demonstrate compliance with the NO_X emissions limit in accordance with Chapter 62-297, F.A.C. A visible emissions test shall be conducted concurrently with each NO_X emissions test. [Rule 62-297.401, F.A.C.; and, 0950111-005-AV]
- C.15. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. See specific conditions C.7. and C.11.

[Rules 62-213.440 and 62-297.440, F.A.C.; and, 0950111-005-AV]

- C.16. <u>Carbon Monoxide</u>. The firing of low sulfur fuel oil and proper operation of the emissions units negates the need to conduct a mass emissions test for carbon monoxide. [Rule 62-297.310(7), F.A.C.; and, 0950111-005-AV]
- C.17. <u>Volatile Organic Compounds</u>. The firing of low sulfur fuel oil and proper operation of the emissions units negates the need to conduct a mass emissions test for volatile organic compounds.

[Rule 62-297.310(7), F.A.C.; and, 0950111-005-AV]

- C.18. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- C.19. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

C.20. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).
- (e) <u>Allowed Modification to EPA Method 5</u>. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- C.21. <u>Required Stack Sampling Facilities</u>. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

- C.22. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit 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. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit 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 matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

C.23. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning only liquid fuel(s) for less than 400 hours per year. See specific conditions C.22.(a)3., 4., & 5.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Record keeping and Reporting Requirements

C.24. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

C.25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

C.26. For each emissions unit, the permittee shall maintain a log of the hours operated and the amount of fuel fired.

[Rules 62-4.070 and 62-213.440, F.A.C.]

C.27. The amount of fuel fired and the megawatt output from each emissions unit shall be included on the visible emissions test report.

[Rule 62-213.440, F.A.C.; and, 0950111-016-AC]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit.

E.U./Facility I.D.	Brief Description	Manufacturer
North Service Area Dry Cleaning Plant		
-001/(LDC-1)	Dry Cleaning Unit #1	Multimatic Machine

There is one perchloroethylene dry cleaning unit (#1). #1 is a Multimatic Atlas 45. The perchloroethylene dry cleaning unit is vented to a single exhaust stack with precleaning provided by a new chiller system followed by and in series with an existing carbon absorption system (a American Laundry Machinery, Inc.: Model PC 212 activated carbon vapor adsorber). The permittee recently upgraded the existing control system by installing a chiller system, which reduced the potential perchloroethylene emissions (1.5 TPY to 0.5 TPY) and load on the existing carbon absorption system.

{Permitting Note(s): The perchloroethylene dry cleaning operation is subject to 40 CFR 63, Subpart M, National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.}

The following specific conditions apply to the emissions units listed above:

Standards

- D.1. The permittee of each existing dry cleaning system shall comply with either 40 CFR 63.322(a)(1) or (a)(2).
- (1) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device.
- (2) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a carbon adsorber installed in the dry cleaning machine prior to September 22, 1993.

[40 CFR63.322(a)(1) & (2)]

- D.2. The permittee shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times. [40 CFR 63.322(c)]
- D.3. The permittee of each dry cleaning system shall operate and maintain the system according to the manufacturers' specifications and recommendations.

 [40 CFR 63.322(d)]

- D.4. Each refrigerated condenser used for the purposes of complying with 40 CFR 63.322(a) or (b) and installed on a dry-to-dry machine, dryer, or reclaimer:
- (1) Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;
- (2) Shall be monitored according to 40 CFR 63.323(a)(1); and
- (3) Shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser. [40 CFR 63.322(e)(1), (2), & (3)]
- D.5. Each refrigerated condenser used for the purpose of complying with 40 CFR 63.322(a) and installed on a washer:
- (1) Shall be operated to not vent the air-perchloroethylene gas-vapor contained within the washer to the atmosphere until the washer door is opened;
- (2) Shall be monitored according to 40 CFR 63.323(a)(2). [40 CFR 63.322(f)(1) & (2)]
- D.6. Each carbon adsorber used for the purposes of complying with 40 CFR 63.322(a) or (b):
- (1) Shall not be bypassed to vent or release any air-perchloroethylene gas-vapor stream to the atmosphere at any time; and
- (2) Shall be monitored according to the applicable requirements in 40 CFR 63.323(b) or (c). [40 CFR 63.322(g)(1) & (2)]
- D.7. The permittee of an affected facility shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks. [40 CFR 63.322(j)]
- D.8. The permittee of a dry cleaning system shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:
- (1) Hose and pipe connections, fittings, couplings, and valves;
- (2) Door gaskets and seatings;
- (3) Filter gaskets and seatings;
- (4) Pumps;
- (5) Solvent tanks and containers;
- (6) Water separators;
- (7) Muck cookers;
- (8) Stills;
- (9) Exhaust dampers;
- (10) Diverter valves; and
- (11) Cartridge filter housings.
- [40 CFR 63.322(k)(1) thru (11)]
- D.9. The permittee of a dry cleaning system shall repair all perceptible leaks detected under 40 CFR 63.322(k) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within 2 working days of detecting such a leak. Such repair parts shall be installed within 5 working days after receipt.

 [40 CFR 63.322(m)]

D.10. If parameter values monitored under 40 CFR 63.322(e), (f), or (g), do not meet the values specified in 40 CFR 63.323(a), (b), or (c), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. [40 CFR 63.322(n)]

Test Methods and Monitoring

- D.11. When a refrigerated condenser is used to comply with 40 CFR 63.322(a)(1) or (b)(1):
- (1) The permittee shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer weekly with a temperature sensor to determine if it is equal to or less than 7.2° C (45° F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2° C (45° F) to an accuracy of $\pm 1.1^{\circ}$ C ($\pm 2^{\circ}$ F).
- (2) The permittee shall calculate the difference between the temperature of the air-perchloroethylene gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-perchloroethylene gas-vapor stream exiting the refrigerated condenser on the washer weekly to determine that the difference is greater than or equal to 11.1° C (20° F).
 - (i) Measurements of the inlet and outlet streams shall be made with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 0° C (32° F) to 48.9° C (120° F) to an accuracy of $\pm 1.1^{\circ}$ C ($\pm 2^{\circ}$ F).
 - (ii) The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values.

[40 CFR 63.323(a)(1) & (2)]

- D.12. When a carbon adsorber is used to comply with 40 CFR 63.322(a)(2) or exhaust is passed through a carbon adsorber immediately upon machine door opening to comply with 40 CFR 63.322(b)(3), the permittee shall measure the concentration of perchloroethylene in the exhaust of the carbon adsorber weekly with a colorimetric detector tube, while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber to determine that the perchloroethylene concentration in the exhaust is equal to or less than 100 parts per million by volume. The permittee shall:
- (1) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of perchloroethylene in air to an accuracy of \pm 25 parts per million by volume; and
- (2) Use the colorimetric detector tube according to the manufacturer's instructions; and
- (3) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet.

[40 CFR 63.323(b)(1), (2) & (3)]

- D.13. If the air-perchloroethylene gas-vapor stream is passed through a carbon adsorber prior to machine door opening to comply with 40 CFR 63.322(b)(3), the permittee of an affected facility shall measure the concentration of perchloroethylene in the dry cleaning machine drum at the end of the dry cleaning cycle weekly with a colorimetric detector tube to determine that the perchloroethylene concentration is equal to or less than 300 parts per million by volume. The permittee shall:
- (1) Use a colorimetric detector tube designed to measure a concentration of 300 parts per million by volume of perchloroethylene in air to an accuracy of \pm 75 parts per million by volume; and
- (2) Use the colorimetric detector tube according to the manufacturer's instructions; and
- (3) Conduct the weekly monitoring by inserting the colorimetric detector tube into the open space above the articles at the rear of the dry cleaning machine drum immediately upon opening the dry cleaning machine door.

[40 CFR 63.323(c)(1), (2) & (3)]

- D.14. When calculating yearly perchloroethylene consumption for the purpose of demonstrating applicability according to 40 CFR 63.320, the permittee shall perform the following calculation on the first day of every month:
- (1) Sum the volume of all perchloroethylene purchases made in each of the previous 12 months, as recorded in the log described in 40 CFR 3.324(d)(1).
- (2) If no perchloroethylene purchases were made in a given month, then the perchloroethylene consumption for that month is zero gallons.
- (3) The total sum calculated in 40 CFR 63.323(d) is the yearly perchloroethylene consumption at the facility.

[40 CFR 63.323(d)(1), (2) & (3)]

Recordkeeping and Reporting Requirements

- D.15. Each permittee of a dry cleaning facility shall submit an initial report signed by a responsible official before a notary public certifying that the information provided in the initial report is accurate and true to the Permitting authority within 90 calendar days after September 22, 1993, which includes the following:
- (1) The name and address of the permittee;
- (2) The address (that is, physical location) of the dry cleaning facility;
- (3) A brief description of the type of each dry cleaning machine at the dry cleaning facility;
- (4) Documentation as described in 40 CFR 63.323(d) of the yearly perchloroethylene consumption at the dry cleaning facility for the previous year to demonstrate applicability according to 40 CFR 63.320; or an estimation of perchloroethylene consumption for the previous year to estimate applicability with 40 CFR 63.320; and
- (5) A description of the type of control device(s) that will be used to achieve compliance with 40 CFR 63.322(a) or (b) and whether the control device(s) is currently in use or will be purchased.
- (6) Documentation to demonstrate to the Permitting authority's satisfaction that each room enclosure used to meet the requirements of 40 CFR 63.322(a)(3) meets the requirements of 40 CFR 63.322(a)(3)(i) and (ii).

[40 CFR 63.324(a)(1) thru (6)]

- D.16. Each permittee of a dry cleaning facility shall submit a statement signed by a responsible official in the presence of a notary public to the Permitting authority by registered letter on or before the 30th day following the compliance dates specified in 40 CFR 63.320(b) or (c), certifying the following:
- (1) The yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to 40 CFR 63.323(d);
- (2) Whether or not they are in compliance with each applicable requirement of 40 CFR 63.322; and
- (3) All information contained in the statement is accurate and true. [40 CFR 63.324(b)(1), (2) & (3)]
- D.17. Each permittee of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years:
- (1) The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchases; if no perchloroethylene is purchased during a given month then the permittee would enter zero gallons into the log;
- (2) The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month as specified in 40 CFR 63.323(d);
- (3) The dates when the dry cleaning system components are inspected for perceptible leaks, as specified in 40 CFR 63.322(k) or (l), and the name or location of dry cleaning system components where perceptible leaks are detected;
- (4) The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with 40 CFR 63.322(m) and (n);
- (5) The date and temperature sensor monitoring results, as specified in 40 CFR 63.323 if a refrigerated condenser is used to comply with 40 CFR 63.322(a) or (b); and
- (6) The date and colorimetric detector tube monitoring results, as specified in 40 CFR 63.323, if a carbon adsorber is used to comply with 40 CFR 63.322(a)(2) or (b)(3). [40 CFR 63.324(d)(1) thru (6)]
- D.18. Each permittee of a dry cleaning facility shall retain on-site a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

 [40 CFR 63.324(e)]

Section III. Emissions Unit(s) and Conditions.

Subsection E. This section addresses the following emissions unit.

E.U. ID No./Facility ID No.	Brief Description	
-112/DAK-1	Disney's Animal Kingdom Animal Crematory: Necropsy	
	Building	

This emissions unit is an animal crematory, a Crawford Model CD800 Animal Carcass Incinerator, located at Disney's Animal Kingdom, specifically at the Necropsy Building.

{Permitting Notes: This emissions unit is subject to the permitting requirements of Rule 62-296.401(1), F.A.C., Incinerators with a Charging Rate Less Than 50 Tons Per Day.}

Essential Potential to Emit (PTE) Parameters

- E.1. Permitted Capacity.
- a. The emissions unit's processing capacity shall not exceed 800 lbs per four-hour period (equivalent to 200 lbs/hr); and,
- b. The emissions unit's maximum heat input shall not exceed 3.0 MMBtu/hr while firing only natural gas.

[Rules 62-4.070, 62-4.160(2), 62-296.401(1), and 62-297.310(2)(b), F.A.C.]

- E.2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition **E.28**. [Rule 62-297.310(2), F.A.C.]
- E.3. <u>Hours of operation</u>. The emissions unit is allowed to operate continuously, i.e., 8760 hours per year.

[Rule 62-21.200, Definitions - Potential to Emit (PTE), F.A.C.]

E.4. Methods of Operation - Fuels. The only fuel authorized to be burned is natural gas. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions E.5. thru E.7. are based on the specified averaging time of the applicable test method.}

- E.5. <u>Visible emissions</u>. No visible emissions (5 percent opacity) except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one-hour period. [Rule 62-296.401(1)(a), F.A.C.]
- E.6. <u>Particulate matter</u>. Particulate matter emissions shall not exceed 0.080 grains per dry standard cubic foot of flue gas, corrected to $7\% O_2$. [Rule 62-296.401(6)(a), F.A.C.]
- E.7. <u>Carbon monoxide</u>. Carbon monoxide (CO) emissions shall not exceed 100 parts per million by volume (ppmv), dry basis, corrected to 7% O₂ on an hourly average basis. [Rule 62-296.401(6)(b), F.A.C.]

E.8. Operation Residence Time and Temperature(s). The design of the secondary chamber combustion zone shall be such that it has a minimum residence time of 1.0 seconds at 1800 degrees Fahrenheit (°F). The actual operating temperature of the secondary chamber combustion zone shall be no less than 1600 °F throughout the combustion process in the primary chamber. Cremation in the primary chamber shall not begin unless the secondary chamber combustion zone temperature is equal to or greater than 1600 °F.

[Rule 62-296.401(6)(c), F.A.C.]

Excess Emissions

- E.9. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- E.10. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Operations

E.11. This emissions unit is permitted to incinerate only dead animals and, if applicable, the bedding and the remains associated with the animals placed in leak-proof containers. Containers may contain up to 0.5 percent by weight chlorinated plastics. Plastic bags used for the incineration of animals shall be nonchlorinated and no less than 3 mils thick. If containers are incinerated, documentation from the manufacturers certifying that they are composed of 0.5 percent or less by weight chlorinated plastics must be kept on-file at the site for the duration of their use and for at least five years after their use. This documentation must also be submitted with any application for renewal air operation permit.

[Rules 62-213.440 and 296.401(6)(e), F.A.C.]

- E.12. This emissions unit is <u>not</u> permitted to cremate dead animals which were used for medical or commercial experimentation. No other material, including biomedical waste* as defined in Rule 62-210.200, F.A.C. (see below), shall be incinerated.
- * "Biomedical Waste": Any solid waste or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and, discarded sharps. The following are also included:
- (a) Used absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and, absorbent materials saturated with blood or blood products that have dried.
- (b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids, or secretions or excretions visibly contaminated with blood, but have not been treated by a method listed in Section 381.0098, F.S., or a method approved pursuant to Rule 64E-16, F.A.C. [Rules 62-296.401(6)(f) and 62-210.200, F.A.C.]

Training

- E.13. Operators of the incinerator shall be trained by the equipment manufacturer's representatives or an equivalent state-approved organization. The content of the training program shall be submitted to the Department of Environmental Protection's Bureau of Air Regulation for approval. [Rule 62-296.401(6)(g), F.A.C.]
- E.14. The content of the training program shall be submitted to the Department for approval through the permitting process and shall meet, at a minimum, the criteria applicable to cremation set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook, EPA 453/B-93-018, and Instructor's Guide, EPA 453/B-93-019. [Rule 62-296.401(6)(g)1., F.A.C.]
- E.15. A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program must be submitted to the Department within 15 days of training. The owner of any new crematory units shall submit copies of the operator certificates within 15 days after completion of the initial compliance test pursuant to the unit's construction permit.

[Rule 62-296.401(6)(g)2., F.A.C.]

E.16. An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional five years after termination of employment. [Rules 62-213.440 and 62-296.401(6)(g)3., F.A.C.]

Monitoring of Operations

- E.17. Determination of Process Variables.
- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment 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.

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

E.18. The incinerator must be tested in its normal operating mode. In order for the permittee to be allowed to incinerate bedding, bags, or containers, these items shall be incinerated in normal amounts along with the animal remains during the compliance test burns. An incinerator which burns only animal remains during the compliance tests shall be permitted to incinerate only animal remains until a test determines compliance while incinerating bedding, bags, or containers along with the animal remains.

[Rule 62-4.070(3), F.A.C.]

- E.19. <u>Visible Emissions</u>. The permittee shall have an initial and formal compliance test for visible emissions conducted during each federal fiscal year (October 1 September 30). [Rules 62-296.401(6)(j)1. and 62-297.310(7)(a)4.a., F.A.C.]
- E.20. <u>Visible Emissions</u>. Compliance with the visible emissions limitation shall be determined by using DEP Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-296.401(6)(h)1. and 62-297.401(9)(c), F.A.C.]
- E.21. <u>Visible Emissions</u>. The required minimum period of observation for an opacity compliance test shall be sixty (60) minutes. The opacity test observation period shall begin when incineration begins in the primary chamber. [Rule 62-297.310(4)(a)2., F.A.C.]
- E.22. <u>Particulate Matter, Carbon Monoxide, and Oxygen</u>. The permittee shall have an initial compliance test for particulate matter, carbon monoxide, and oxygen; after that, a compliance test shall be conducted prior to renewing the operation permit. [Rules 62-296.401(6)(j)2. and 62-297.310(7)(a)3., F.A.C.]
- E.23. <u>Particulate Matter</u>. Compliance with the particulate matter emission limitation shall be determined by using EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. [Rule 62-296.401(6)(h)4., F.A.C.]
- E.24. <u>Carbon Monoxide</u>. Compliance with the carbon monoxide emission limitation shall be determined by using EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-296.401(6)(h)2., F.A.C.]
- E.25. Oxygen. The oxygen concentration shall be determined by using EPA Method 3, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-296.401(6)(h)3., F.A.C.]
- E.26. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.401(6)(h)5., F.A.C.]
- E.27. Required Number of Test Runs. 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 emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may

accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

- E.28. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(a), F.A.C.]
- E.29. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

E.30. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached). [Rule 62-297.310(4), F.A.C.]
- E.31. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

- E.32. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit 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. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or,
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to 100 tons per year or more of any other regulated air pollutant
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit 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 matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

E.33. <u>Compliance Demonstration</u>. Compliance with the carbon monoxide and particulate emission standards may be demonstrated by submission of a test report for an identical (same make, model, and permitted capacity) crematory unit operating in compliance with a valid Department air permit and tested pursuant to that permit. The test data in the test report must be less than five years old and may or may not be obtained from the unit that is being permitted.

[Rule 62-296.401(6)(k), F.A.C.]

Continuous Emissions Monitoring Requirements

E.34. Continuous Emissions Monitoring Requirements. The permittee shall install, operate, and maintain on the animal crematory continuous monitors to record temperature at the point or beyond where 1.0 second gas retention time is obtained in the secondary combustion zone in accordance with the manufacturer's instructions. A complete file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and adjustments, preventive maintenance, and corrective maintenance performed on these systems or devices, shall be recorded in a permanent legible form available for inspection. Combustion temperature monitoring documentation shall include operator name, operator indication of when cremation in the primary chamber begins, date, time, and temperature markings. The file shall be retained for at least five years following the recording of such measurements, reports, and records.

[Rules 62-213.440 and 62-296.401(6)(1), F.A.C.

Reports and Recordkeeping.

E.35. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

E.36. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection F. This section addresses the following emissions unit.

E.U. ID No./Facility ID No.	Brief Description
-120	Three Diesel Electric Generators Serving the DISC
	Building

Both the annual fuel quantity used and percent sulfur, by weight, in the fuel oil are limited for this emissions unit. The nameplate rating of each generator is 1.75 megawatts (MW). The manufacturer is Spectrum Detroit Diesel. The model number is 1750DS-4. The generators were installed in November, 2002, with initial plans to operate them only as conditionally exempt emergency generators. Diesel fuel for the generators is stored in three 10,000 gallon fuel tanks. Air Construction Permit 0950111-022-AC reclassified the unit to regulated status, allowing increased operational flexibility for the facility.

Operational Requirements

F.1. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment.

[Rule 62-4.070(3), F.A.C.; and 0950111-023-AC, Specific Condition A.11.]

F.2. Methods of Operation. Fuels. The only fuel allowed to be burned in this emissions unit is diesel fuel oil, with a maximum sulfur content of 0.5%, by weight. The amount of diesel fuel fired in the unit shall not exceed 225,000 gallons per year.

[Rule 62-4.070(3), F.A.C.; and 0950111-023-AC, Specific Condition A.12.]

Testing, Compliance Determination, and Reporting

- F.3. Sulfur Dioxide. The permittee shall demonstrate compliance with the diesel fuel sulfur limit via a fuel analysis provided by the vendor or permittee upon each fuel delivery to the emission unit's three 10,000 gallon diesel fuel tanks.
 - The fuel sulfur content, in percent by weight, for the diesel fuel shall be evaluated using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95, or the latest editions.

{Permitting note: Evaluation of the fuel sulfur content required by this specific condition may be provided by using the fuel vendor's bill of lading for each fuel delivery.} [Rules 62-4.070(3), 62-213.440 and 62-297.440, F.A.C.; and 0950111-023-AC, Specific Condition A.14.]

- **F.4.** Recordkeeping. The following records shall be kept at the facility:
 - Total gallons of diesel fuel oil used during each month for the three generators.
 - The sulfur content, in percent by weight, of all the diesel fuel delivered each month to the three 10,000 gallon tanks, based on the vendor or permittee provided fuel sample analyses. See Specific Condition **F.3.**

The records shall be maintained for a minimum of 5 years and made available to the Central District Office upon request.

[Rule 62-297.310(8), F.A.C.; and 0950111-023-AC, Specific Condition A.15.]

Section IV. This section is the Acid Rain Part.

Operated by: Walt Disney World Co.

ORIS code: 7294: Reedy Creek Combined Cycle

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions unit listed below is regulated under Phase II of the Federal Acid Rain Program.

E.U./Facility ID No.	Description
-088/CEP-1	Reedy Creek Combined Cycle

- A.1. The Phase II permit application(s) submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:
- a. DEP Form No. 62-210.900(1)(a), dated 08/05/02. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- A.2. Sulfur dioxide (SO2) allowance allocations requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
-088*	32432	SO2 allowances, under Table 2 of 40 CFR Part 73	18* rule**	18* rule**	.18* rule**	18* rule**	18* rule**

^{*} The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

- A.3. <u>Emission Allowances</u>. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
- 1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]

^{** &}quot;Rule" denotes that the preceding allocation will be proposed in the upcoming Acid Rain Division rulemaking change. These allowances are unadjusted basis allowances only, unless noted.

- A.4. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-4, TITLE V CONDITIONS} [Rule 62-214.420(11), F.A.C.]
- A.5. <u>Fast-Track Revisions of Acid Rain Parts</u>. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C. [Rules 62-213.413 and 62-214.370(4), F.A.C.]
- A.6. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400, F.A.C. [Rule 62-213.440(1)(c)1., F.A.C.]
- A.7. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

Appendix H-1: Permit History

Walt Disney World Co.
Walt Disney World Resort Complex

Permit No. **0950111-024-AV** Facility ID No. **0950111**

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
All	Facility	0950111-005-AV	01/01/1998	12/31/2002	Initial
-088/CEP-1	CCCT and HRSG	0950111-016-AC	05/25/1999	12/31/2002	Construction (mod.)
		0950111-017-AV	05/25/1999	12/31/2002	Revision
-112/DAK-1	Necropsy Bldg.: Animal Crematory	0950111-013-AC	03/18/1998	12/31/1999	Construction (new)
		0950111-017-AV	05/25/1999	12/31/2002	Revision
-115/DAKU- 52	Tree of Life Boiler	0950111-016-AC	05/25/1999	12/31/2002	Construction (new)
		0950111-017-AV	05/25/1999	12/31/2002	Revision
All	Facility	0950111-021-AV	01/01/2003	12/31/2007	Renewal
-120	Three Diesel Electric Generators Serving the DISC Building	0950111-022-AC	06/16/2004	12/31/2004	Construction (new)
-120		0950111-023-AC		12/31/2004	Construction (mod.)

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Walt Disney World Company
Walt Disney World Resort Complex

Permit No. **0950111-024-AV** Facility ID No. **0950111**

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

Brief Description of Emissions Units and/or Activities:

- A. <u>Commercial/Institutional External Combustion Boilers: Natural Gas Fired</u>. These units are used to heat water.
 - 1. Disney's All-Star Resort (-113): ASR-2 thru ASR-108.
 - 2. Disney's Dixie Landings Resort (-xxx): DLR-1 thru DLR-25.
 - 3. Disney's Port Orleans Resort (-xxx): POR-1 thru POR-16.
 - 4. Disney's Polynesian Resort (-xxx): PR-1 thru PR-4, PR-6 thru PR-9, PR-11 & PR-12.
 - 5. Disney's Typhoon Lagoon (-xxx): TL-1 thru TL-3.
 - 6. Disney's Wilderness Lodge (-xxx): WLR-1 & WLR-2.
 - 7. Disney's Yacht and Beach Club (-xxx): YBC-1 & YBC-2.
 - 8. Disney's Grand Floridian Hotel (-035): GFR-2 thru GFR-18.
 - 9. Disney-MGM Studio Tours (-053): STB-1, STB-2A, STB-3 thru STB-8.
 - 10. Disney's Blizzard Beach (-083): BB-1 thru BB-5.
 - 11. Disney's Boardwalk Resort (-091): BDW-3 thru BDW-10.
 - 12. Disney's Magic Kingdom (-092): MK-3.
 - 13. Disney's Animal Kingdom (-103): DAKU-1 thru DAKU-51.
 - 14. Disney's Coronado Springs Resort (-095): COS-1 thro COS-37.
- B. Commercial/Institutional External Combustion Boilers: Natural/L.P. Gas Fired. These units are used to heat water.
 - 1. Disney-MGM Studio Tours (-053): STB-2B1 & STB-2B2 (replaced HWG STB-2B).
- C. <u>Commercial/Institutional External Combustion Boiler: Primarily fired on Natural Gas or Propane (New No. 2 distillate fuel oil is used for back-up purposes)</u>. These units are used to heat water.
 - 1. Reedy Creek Improvement District (-076): EPCOT HWG-1 thru -3.
- D. <u>Commercial/Institutional External Combustion Boiler: Primarily fired on Natural Gas (New No. 2 distillate fuel oil is used for back-up purposes).</u> This unit is used to heat water.
 - 1. Reedy Creek Improvement District (-081): CEP-2.
- E. <u>Commercial/Institutional External Combustion Boilers: Natural Gas Fired Only.</u> This unit is used to make steam for the operation of the features of the "Tree of Life" and has a heat input rating of 1.075 MMBtu/hr.
 - 1. Disney's Animal Kingdom "Tree of Life" Boiler (-115): DAKU-52.

- F. Administration Area Laundry (-072): There are two natural gas fired thermal fluid heaters (LAU-1 & LAU-2). They are manufactured by Fulton Thermal Corporation and the Model No. is FT-C 1000. The combined heat input is 26 MMBtu/hr.
- G. North Service Area Central Shops Building Annex (-005).
- 1. Sand Blast Chamber No. 1 (NSA-17). This emissions unit operation has a baghouse control system manufactured by Carter-Day, Model 14-RJ-84 to control particulate matter and visible emissions. The collection efficiency is estimated to be 99.7% for particulate matter @ 10 microns in size. The sand blast chamber utilization rate of sand is below 7 lbs/hr.
- H. Paint Spray Booths. The following paint spray booth (PSB) operations are VOC emitters from the use of coatings, paints, thinners, and clean-up solvents. The permittee maintains accountability of VOC usage through a material balance scheme. All of the PSBs are equipped with paint arrestor type filters to control particulate matter and visible emissions. All hazardous wastes will be disposed pursuant to RCRA and Chapter 62-730, F.A.C. Also, NSA-7 has an associated natural gas fired curing oven.

E.U./Facility I.D.	Brief Description				
North Service Area Boa	North Service Area Boat Maintenance and Painting Facility				
-006/NSA-18	NSA Boat Maintenance PSB				
North Service Area Central Shops Building					
-007/NSA-1	NSA PSB #1				
-007/NSA-2	NSA PSB #2				
-007/NSA-3	NSA PSB #3				
-007/NSA-4	NSA Metalizing PSB				
-007/NSA-5	NSA Staff Shop PSB #1				
-007/NSA-6	NSA Staff Shop PSB #2				
-007/NSA-7	NSA Water Wash Plastisol PSB #1; includes a natural gas fired curing oven				
-007/NSA-11	NSA Character Head Spray Box				
-007/NSA-12	NSA Artist's Preparation Shop PSB				
-007/NSA-14	NSA Paint Shop PSB #6				
-007/NSA-15	NSA Central Shop Paint Mixing Stations (7)				
-007/NSA-16	NSA Urethane Adhesive Lay-up Workstations (4)				
North Service Area Lof	North Service Area Lofting Building				
-014/NSA-8	NSA Lofting Building PSB				
North Service Area Central Shops Building Annex					
-015/NSA-9	NSA Paint Shop PSB #4				
-015/NSA-10	NSA Paint Shop PSB #5				
Disney-MGM Studio					
-061/MGM-10	Studio Craft PSB				
Buena Vista Construction	Buena Vista Construction				
-062/BVC-1	062/BVC-1 PSB				
Lake Buena Vista Com	Lake Buena Vista Community Village				
-063/LBV-1	PSB #1				
-063/LBV-2	PSB #2				
Disney Village					
-065/VM-3 Marketplace PSB					
Ft. Wilderness Golf Course					
-066/FWR-4	PSB				

E.U./Facility I.D.	Brief Description			
Disney's Yacht & Beach	ı Club			
-067/YBC-3	PSB			
EPCOT Center				
-068/EP-1	Maintenance PSB			
-068/EP-2	Display PSB			
-070/EP-3	Marina PSB			
South Service Area				
-071/SSA-1	Traffic Control Equipment PSB			
Disney's Magic Kingdon	<u>m</u>			
-075/MK-1	PSB #1			
-093/MK-2	PSB #2			
Disney's Boardwalk Res				
-094/BR-1	PSB #Î			
Disney's Coronado Sprin				
-102/COS-41	PSB #1			
Disney's All Star Resort				
-114/ASR-1	PSB #1			
-	eature Animation Building			
-117/MGM-xx	PSB			
-117/MGM-xx	PSB			
NSA Monorail Building				
-118/NSA-20	Monorail Trains Spray Booth			
	Disney's Animal Kingdom Paint Shop			
-xxx/DAKU-53	Maintenance PSB			

- I. Stand-by/Emergency Generators (-101). The Walt Disney World Resort Complex operates 120 stand-by/emergency generators that fire new No. 2 distillate diesel fuel oil (108), natural gas (11), or LP gas (1). Of these generators within the complex, 85 are assigned to the Walt Disney World Co. operations and 35 are assigned to the Reedy Creek Improvement District operations.
- J. Facility-wide Fugitive VOC emissions. There are several large architectural type structures that cannot be coated/painted within an enclosed building, but have to be coated/painted after the structure has been made. Therefore, this subsection covers such type activities. Just as the paint spray booth operations, the permittee maintains accountability of VOC usage through a material balance scheme. All hazardous wastes will be disposed pursuant to RCRA and Chapter 62-730, F.A.C.

K. Miscellaneous

- 1. Degasifiers
- 2. Equipment used exclusively for space heating
- 3. Fireplaces
- 4. Natural gas gate and compression station, including ordorant addition equipment
- 5. Oil and organic solvent storage tanks >550 gallons
- 6. Parts cleaning and degreasing stations
- 7. Pool heaters < 1 MMBtu/hr maximum gross heat output, each
- 8. Portable kerosene space heaters
- 9. Sewage treatment facilities

- 10. Silk screening
- 11. Smokehouse
- 12. Storage tanks <550 gallons
- 13. Water heaters used for comfort heating, <1 MMBtu/hr maximum gross heat output, each
- 14. Twenty-six natural gas-fired laundry dryers @ 32.6 MMBtu/hr total heat input.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Walt Disney World Company
Walt Disney World Resort Complex

Permit No. 0950111-024-AV Facility ID No. 0950111

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. Applications of fungicides, herbicides and pesticides.
- 2. Battery charging.
- 3. Blueprint reproduction.
- 4. Brazing, soldering and welding.
- 5. Campfires.
- 6. Compressed air systems, including air compressors and driers.
- 7. Degasifiers.
- 8. Electric drying oven with no air pollutant emissions expected.
- 9. Equipment used exclusively for space heating.
- 10. Equipment used exclusively to sand and shape wood or plastic.
- 11. Fireplaces.
- 12. Fresh water cooling towers.
- 13. Generator venting.
- 14. HVAC and chiller units that are in compliance with Rule 62-213.300(3)(o), F.A.C.
- 15. Inorganic substance storage tanks >550 gallons.
- 16. Kitchen exhaust.
- 17. Laboratory hood vents.
- 18. Latex injection.
- 19. Laundry dryers.
- 20. Lube oil tank vents.
- 21. Lube oil vents associated with rotating equipment.
- 22. Maintenance activity associated with transformers, switches, switchgear processing (including cleaning, changing and venting).
- 23. Natural gas gate and compression station, including odorant addition equipment.
- 24. Natural gas system maintenance.
- 25. Office equipment and office ventilation.
- 26. Oil and organic solvent storage tanks >550 gallons

- 27. Oil truck unloading equipment.
- 28. Oil/water separators.
- 29. Parts cleaning and degreasing stations, except for those subject to Rule 62-213.300(1)(c), F.A.C.
- 30. Pool heaters with less than 1 MMBtu/hr maximum gross heat output each.
- 31. Portable kerosene space heaters.
- 32. Recycling operations, including sorting, compacting and baling.
- 33. Refrigeration systems that are in compliance with Rule 62-213.300(3)(o), F.A.C.
- 34. Routine maintenance and repair activities, except painting
- 35. Sewage treatment facilities.
- 36. Sewer line vents.
- 37. Silk screening.
- 38. Smokehouse.
- 39. Special effects.
- 40. Stack test sampling equipment.
- 41. Tiki torches.
- 42. Turbine vapor extractor.
- 43. Black-start Generator.
 - 1. This generator has historically fired a total amount of less than 10,000 gallons per year.
- 44. Water heaters used for comfort heating with less than 1 MMBtu/hr maximum gross heat output each:
 - a. <u>Disney's Animal Kingdom</u>. Fifty-three (53) natural gas fired radiant comfort heaters with a gross maximum heat output of less than one million Btu per hour per unit pursuant to Rule 62-210.300(3)(a)4., F.A.C. (DAKE-1 thru DAKE-53)
 - b. Etc.
- 45. Not Federally Enforceable. Two (2) petroleum solvent dry cleaning machines with a total solvent consumption of less than 3,250 gallons per year pursuant to Rule 62-210.300(3)(a)18., F.A.C.

APPENDIX CAM

Compliance Assurance Monitoring Requirements

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1.-17 are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

- The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
 [40 CFR 64.6(a)]
- 2. The attached CAM plan(s) include the following information:
 - (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
 - (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
- (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable. [40 CFR 64.6(c)(1)]
- The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see CAM Conditions 5. 9.) and reporting exceedances or excursions (see CAM Conditions 10. 14.).
 [40 CFR 64.6(c)(2)]
- 4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see CAM Conditions 5. 17.).

 [40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

- Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
 CFR 64.7(a)]
- 6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

 [40 CFR 64.7(b)]
- 7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

- 8. Response to excursions or exceedances.
 - a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. <u>Documentation of need for improved monitoring.</u> If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under CAM Condition 8.a., above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with CAM Condition 4., an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

11. Elements of a QIP:

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
 - b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - (i) Improved preventive maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control performance.
 - (v) More frequent or improved monitoring (only in conjunction with one or more steps under CAM Condition 11.b(i) through (iv), above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

- 13. Following implementation of a QIP, upon any subsequent determination pursuant to CAM Condition 8.b., the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
 - a. Failed to address the cause of the control device performance problems; or
 - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

- 15. General reporting requirements.
 - a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
 - b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
 - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

- **16.** General recordkeeping requirements.
 - a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to CAM Conditions 10. through 14. and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
 - b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

- 17. It should be noted that nothing in this appendix shall:
 - a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
 - b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
 - c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

MONITORING APPROACH SUBMITTAL

I. Background

A. <u>Emissions Unit</u>

Description:

(Type of emissions point) with a Natural Gas-Fired Duct Burner-

Heat Recovery Steam Generator

Identification:

(Emissions point number)

<u>088</u>

Facility: (Location)

Walt Disney World Resort Complex -

Combined Cycle Combustion Turbine

<u>Facility ID 0950111</u>

B. Applicable Regulation, Emission Limits, and Monitoring Requirements

Regulation No.: 40 CFR 60 Subpart GG

Pollutant: Carbon Monoxide

25 lbs/hr or 110 tpy burning natural gas _

(Emissions limit)

Pollutant: Carbon Monoxide

24 lbs/hr or 4 tpy burning fuel oil

(Emissions limit)

C. <u>Control Technology</u>

Carbon Monoxide (CO) is controlled or reduced by the use of a catalytic oxidation system, which is effectively a passive control system. The catalyst (stainless steel foil coated with calcined alumina with platinum metal) enhances the chemical reaction between oxygen and carbon monoxide and forms carbon dioxide as the end product. This reaction is greater than 80% efficient at 392° F (200° C) within minutes of gas turbine startup, before power generation begins. The catalyst normally operates at a temperature around 800° F (427° C) with corresponding CO removal efficiencies above 90%. The carbon monoxide removal efficiency increases as temperature increases up to the maximum operating limit of 1250° F (677° C). (Refer to the attached graph in Figure 1, which illustrates the carbon monoxide conversion efficiency at varying temperatures up to 500° C (932° F). This system is designed and certified by the manufacturer to operate while the plant is burning either natural gas or new No. 2 diesel fuel oil.

A plant operator occupies the plant control room 24 hours per day, which allows the plant personnel to monitor two key catalyst operating parameters. Namely, catalyst inlet temperature and pressure drop across the catalyst bed. A high temperature alarm is in place to alert the operator if the catalyst inlet temperature exceeds 1250° F (677° C) to protect the bed from thermal damage, and a high-pressure alarm sounds if the pressure drop across the catalyst bed exceeds 3" of water column. The pressure reading serves two purposes: to ensure that there is airflow across the bed, thus verifying that the system is operating, and to alert the plant operator if a possible plugging or fouling has occurred.

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. The selected performance indicators are catalyst inlet temperature, pressure drop across the catalyst bed, and annual analysis of a catalyst test plug. The plant operator manually logs the temperature and the pressure drop once a day, monitors the alarms, and takes action if the readings are outside the allowable operating range. The test plug is analyzed annually to enable the catalyst manufacturer to certify the condition of the catalyst.

TABLE 1: MONITORING APPROACH

		Indicator No. 1	Indicator No. 2
I. Indicator		Catalyst inlet temperature and pressure differential	Annual Test plug analysis
 Measurement Approach		Thermocouples Pressure sensors	A test plug of the catalytic material is removed for the manufacturer's laboratory analysis.
II. Indicator Range		Minimum Temp.: 392° F (200° C) Maximum Temp.: 1250° F (677° C) Maximum pressure diff. = 3" of water column (w.c.)	Manufacturer certifies whether or not the catalyst is within operating specifications.
	QIP Threshold (optional)	An excursion is defined as falling below 392° F (200° C), or rising above 1250° F (677° C), or rising above 3" w.c., during normal operation.	
III.	Performance Criteria		
	A. Data Representativeness	The thermocouples are located at the inlet face of the catalyst bed. The pressure sensors are located on the inlet and outlet faces of the catalyst bed.	A representative sample is removed from the catalyst bed in accordance with manufacturer's operational instructions.
	B. Verification of Operational Status	Plant control room operators monitor the alarm system 24 hours/day and records data once per day.	Manufacturer certified condition of catalyst after initial installation and annually thereafter.
	C. QA/QC Practices and Criteria	Annual testing/calibration of the temperature and pressure sensor transmitters	NA .
	D. Monitoring Frequency	Daily	Annual ~
	Data Collection Procedures	Temperature and pressure readings are recorded daily.	Test plugs are removed when the plant is shut down for annual maintenance.
	Averaging Procedures	NA (monitoring data does not correspond to actual emissions rate.)	NA

Figure 1: Reedy Creek Cogeneration Plant CO Conversion

