Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: City of Homestead	
2. Site Name: Gordon W. Ivey Power Plant	
3. Facility Identification Number: 0250013	[ ] Unknown
4. Facility Location: Street Address or Other Locator: City: County: Zip Code:	
5. Relocatable Facility? [ ] Yes [✓] No	6. Existing Permitted Facility? [✓] Yes [ ] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia Wetherell
Secretary

FAX TRANSMITTAL SHEET

DATE: 10/8/98

TO: James Swartz - Utilities Dept.

PHONE: _____ FAX: (305) 247-4008

FROM: Barbara Boutwell PHONE: (850) 921-9524

Division of Air Resources Management FAX: 850.922.6979

RE: City of Homestead Public Notice for Gordon W. Ivey Municipal Power Plant

CC: _____

Total number of pages including cover sheet: 3

Message

Please have the attached Public Notice published in newspaper no later than October 14, 1998. Please call me or Bruce Mitchell at (850) 921-9506 if you have questions or need further assistance.

If there are any problems with this fax transmittal, please call the above phone number.

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

[illegible]

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V DRAFT Permit No. [illegible]AV

Homestead City Utilities

Gordon W. Ivey Municipal Power Plant

Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue a Title V air operation permit [illegible] Homestead City Utilities/City of Homestead for the Gordon W. Ivey Municipal Power Plant located [illegible] Dade County. The applicant's name and address are: Homestead City [illegible] North [illegible] Avenue, Homestead, Florida 33030.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with [illegible] DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.) The petition must contain the information set forth below and must be filed (received) in Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen days of publication of the public notice or with fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days or receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address and telephone number of the petitioner, name address and telephone number of the petitioner's representative, if any, which shall be the address for service purpose during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so state;

[illegible] statement of the [illegible] facts alleged, as well as the rules and statutes which entitle [illegible]

(f) A demand for relief [illegible]

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may b different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at U.S. EPA, 401 M Street SW., Washington, DC [illegible]

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: [illegible]

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Affected Local Program:
Dade County
Department of Environmental Resources Management
Air Quality Management Division
33 Southwest Second Avenue,
Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925
Fax: 305/372-6954

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.

CITY OF HOMESTEAD, FLORIDA

790 N. HOMESTEAD BOULEVARD/HOMESTEAD, FLORIDA 33030/TELEPHONE: (305) 247-1801

J.W. DEMILLY III, *Mayor*
STEVEN C. BATEMAN, *Vice-Mayor*
WILLIAM T. RUDD, *City Manager*

COUNCILMEN:
RUTH L. CAMPBELL
ELIZA D. PERRY

STEVE SHIVER
NICHOLAS R. SINCORE
ROSCOE WARREN

June 7, 1996

Mr. John Brown
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
2600 Blair Stone Road, Mail Station #5500
Tallahassee, Florida 32399-2400

REF: Title V Operating Permit Application
for the Homestead Power Plant

Dear Mr. Brown:

In compliance with the requirements of Chapter 62-213, FAC, we have prepared and enclosed an application for a Title V Operating Permit for the Homestead's Power Plant. Specifically, we have enclosed four copies of the application for air permit - long form on four computer disks using ELSA version 1.3a accompanied by four hard copies of Section I and the Attachments and Figures portion of the application

If you have any questions or need additional information regarding this submittal, please call me at (305) 247-1801 Ext. 351.

Sincerely,

Mr. John Dorn
Plant Manager

JD:dj

xc: Ivan Clark (R. W. Beck)

Original

Owner/Authorized Representative or Responsible Official

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

Name : James L. Swartz
Title : Director of Utilities

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

Organization/Firm : City of Homestead
Street Address : 675 N. Flagler Ave.
City : Homestead
State : FL Zip Code : 33030-____

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

Telephone : (305)247-1801 Fax : (305)247-4008

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

James L. Swartz
Signature

June 7, 96
Date

* Attach letter of authorization if not currently on file.

4. Professional Engineer Statement :

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

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

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

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

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

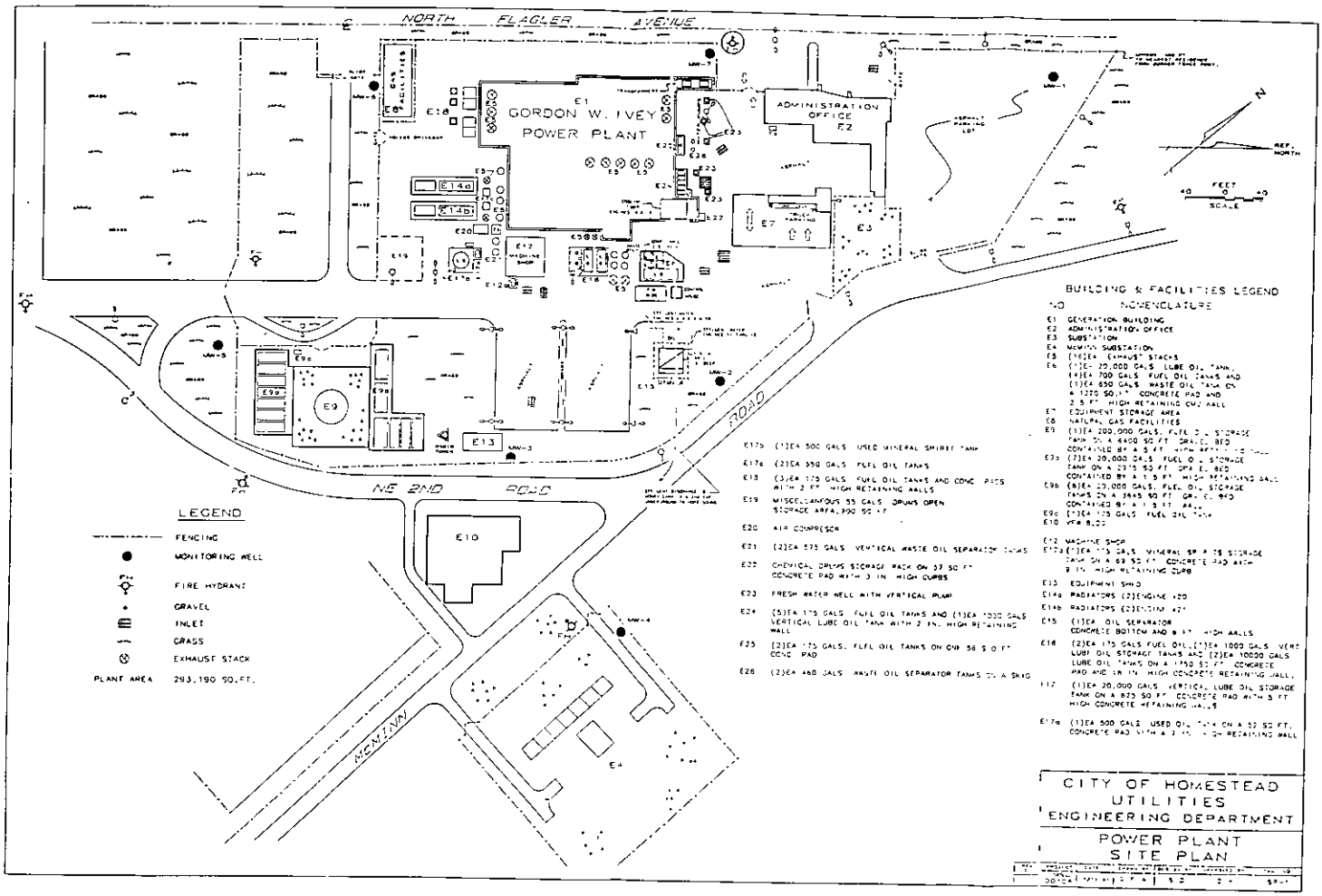
If the purpose of this application is to obtain an initial air operation permit or operation permi revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions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

Signature

May 31, 1996
Date

* Attach any exception to certification statement.

ATTACHMENTS AND FIGURES


NORTH FLAGLER AVENUE
GORDON W. IVEY POWER PLANT
ADMINISTRATION OFFICE
NE 2ND ROAD
MEMORIAL
LEGEND
FENCING
MONITORING WELL
FIRE HYDRANT
GRAVEL
INLET
GRASS
EXHAUST STACK
PLANT AREA 293,190 SQ.FT.
BUILDING & FACILITIES LEGEND
NO NOMENCLATURE
E1 GENERATION BUILDING
E2 ADMINISTRATION OFFICE
E3 SUBSTATION
E4 MEMORIAL SUBSTATION
E5 (16)EA EXHAUST STACKS
E6 (1)EA 20,000 GALS LUBE OIL TANK, (4)EA 700 GALS FUEL OIL TANKS AND (1)EA 650 GALS WASTE OIL TANK ON A 1225 SQ.FT CONCRETE PAD AND 2.5 FT HIGH RETAINING CURB WALL
E7 EQUIPMENT STORAGE AREA
E8 NATURAL GAS FACILITIES
E9 (3)EA 200,000 GALS. FUEL OIL STORAGE TANK ON A 6400 SQ.FT. GRADE BED CONTAINED BY A 5 FT HIGH RETAINING WALL
E9a (2)EA 20,000 GALS FUEL OIL STORAGE TANK ON A 2215 SQ.FT. GRADE BED CONTAINED BY A 1.5 FT HIGH RETAINING WALL
E9b (8)EA 20,000 GALS. FUEL OIL STORAGE TANKS ON A 3845 SQ FT GRADE BED CONTAINED BY A 1.5 FT WALL
E9c (1)EA 125 GALS FUEL OIL TANK
E10 VACANT LOT
E12 MACHINE SHOP
E13 EQUIPMENT SHED
E14a RADIATORS (2)ENGINE #20
E14b RADIATORS (2)ENGINE #21
E15 (1)EA OIL SEPARATOR CONCRETE BOTTOM AND 8 FT HIGH WALLS
E16 (2)EA 175 GALS FUEL OIL, (1)EA 1000 GALS VERT LUBE OIL STORAGE TANKS AND (2)EA 10000 GALS LUBE OIL TANKS ON A 1750 SQ FT CONCRETE PAD AND 10 FT HIGH CONCRETE RETAINING WALL
E17 (1)EA 20,000 GALS VERTICAL LUBE OIL STORAGE TANK ON A 825 SQ FT CONCRETE PAD WITH 5 FT HIGH CONCRETE RETAINING WALLS
E17a (1)EA 500 GALS USED OIL TANK ON A 32.50 FT. CONCRETE PAD WITH A 3 FT HIGH RETAINING WALL
E17b (1)EA 500 GALS USED MINERAL SPIRIT TANK
E17c (2)EA 550 GALS FUEL OIL TANKS
E18 (3)EA 175 GALS FUEL OIL TANKS AND CONC PADS WITH 2 FT HIGH RETAINING WALLS
E19 MISCELLANEOUS 55 GALS DRUMS OPEN STORAGE AREA 900 SQ FT
E20 AIR COMPRESOR
E21 (2)EA 575 GALS VERTICAL WASTE OIL SEPARATOR TANKS
E22 CHEMICAL DRUMS STORAGE PACK ON 57 SQ FT CONCRETE PAD WITH 3 IN HIGH CURBS
E23 FRESH WATER WELL WITH VERTICAL PUMP
E24 (5)EA 175 GALS FUEL OIL TANKS AND (1)EA 1000 GALS VERTICAL LUBE OIL TANK WITH 2 FT HIGH RETAINING WALL
E25 (2)EA 175 GALS. FUEL OIL TANKS ON ONE 56 S.F. CONC PAD
E26 (2)EA 660 GALS WASTE OIL SEPARATOR TANKS ON A SKID
CITY OF HOMESTEAD
UTILITIES
ENGINEERING DEPARTMENT
POWER PLANT
SITE PLAN

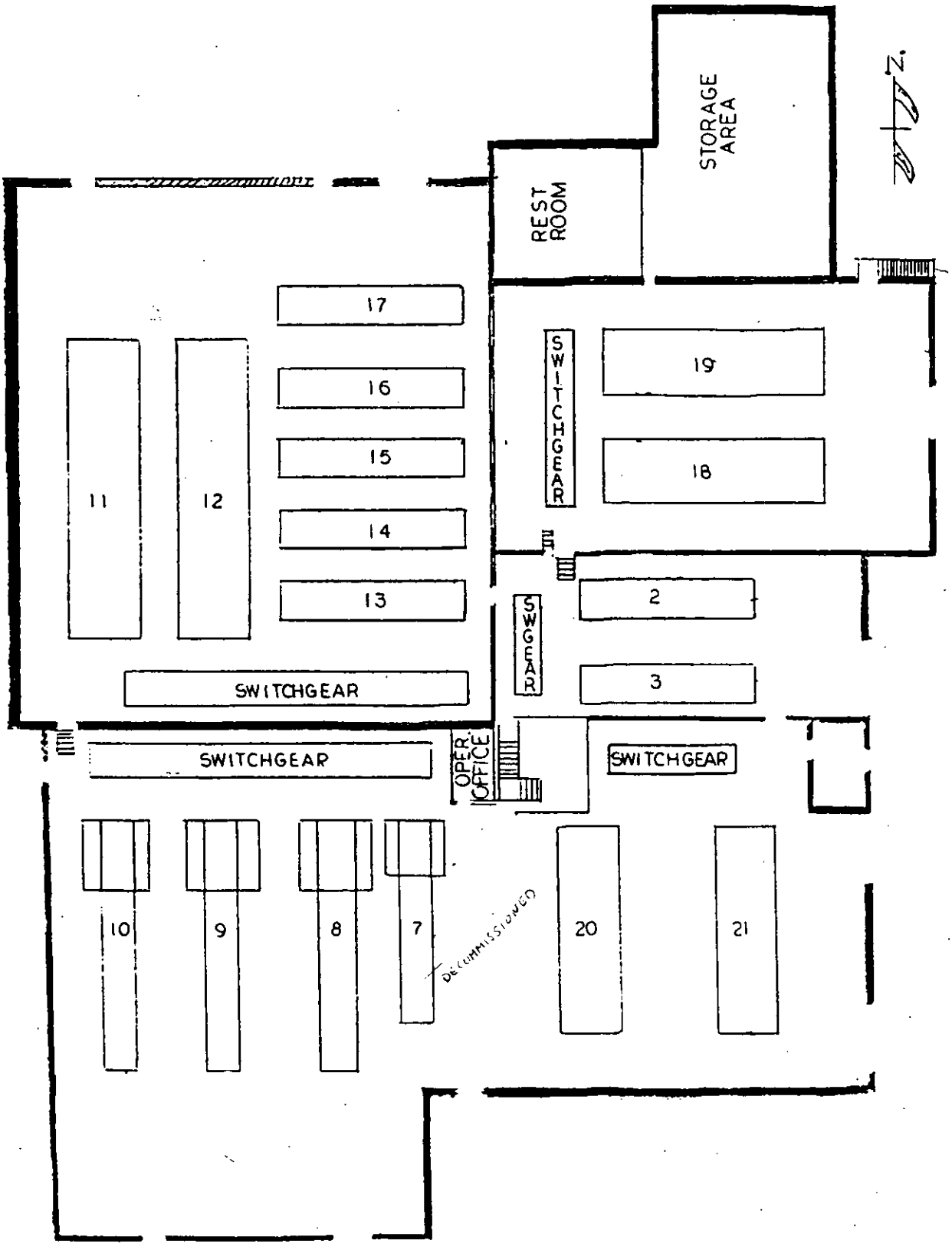
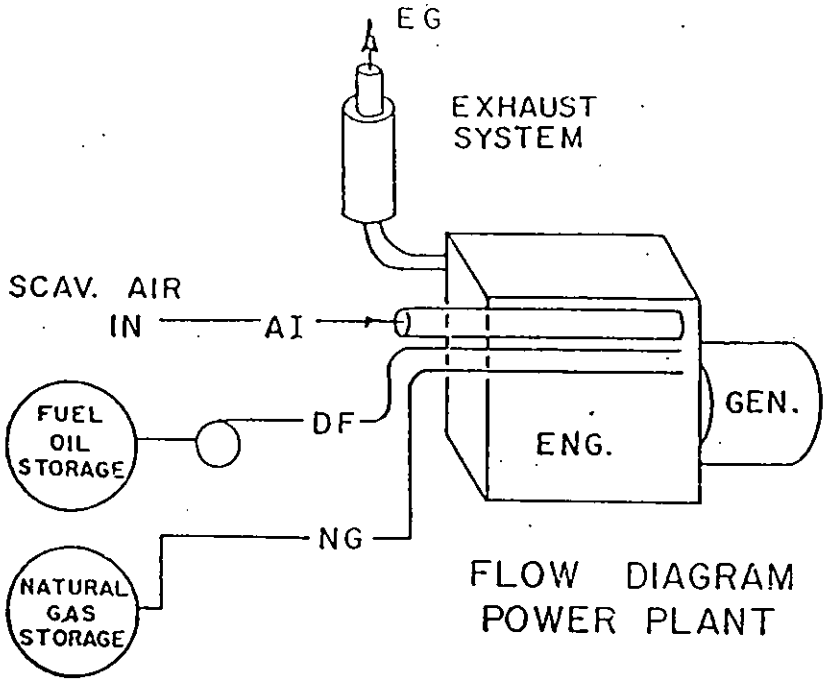
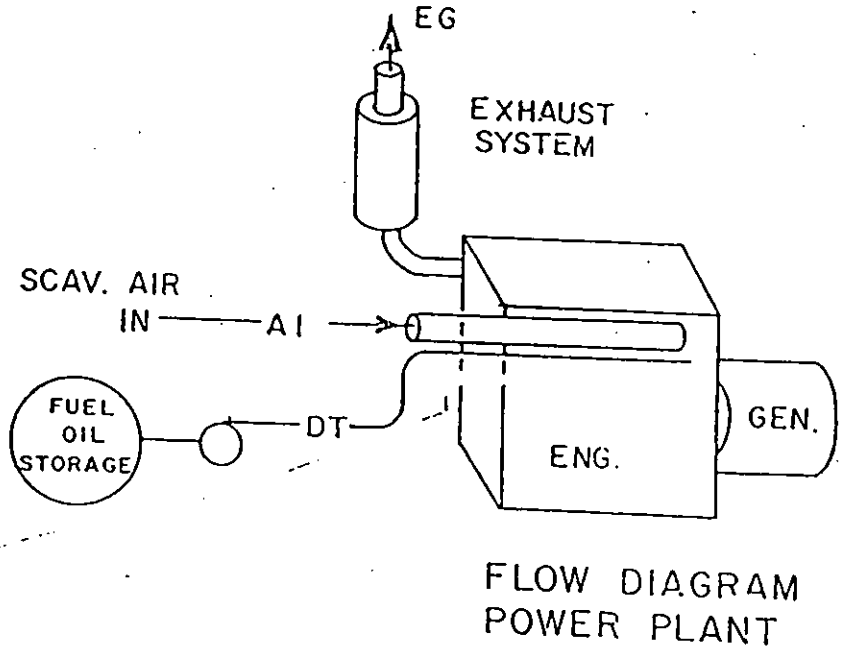

STORAGE AREA
REST ROOM
17
16
15
14
13
11
12
SWITCHGEAR
19
18
SWITCHGEAR
2
3
SWGEAR
SWITCHGEAR
OPER. OFFICE
SWITCHGEAR
10
9
8
7
DECOMMISSIONED
20
21

FIGURE 2



TYPICAL FOR DUAL FUEL UNITS



TYPICAL FOR OIL UNITS

Figure 3

Attachment A

COMPLIANCE STATEMENT

I, the undersigned, and the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on infromation and belief formed after resonable inquirey, that the statements made and data contained in this report are true, accurate, and complete."

James L. Swartz
Director of Utilities

h:\005186\00-00099\hmststat.wk4

Attachment B

Fuel Analyses for Natural Gas and No. 2 Fuel Oil

Colonial Pipeline Company

3.35.1

SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL

Issue No. 3: Grade 74
Cancels Previous Issues of Grade 74

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500		2.5	
Color Visual		Undyed		
Viscosity, cSt @ 38°C (100°F)	D445	2.0	* 3.6	
Pour Point	D97			2
Cloud Point	D2500			2
Corrosion, 3 hrs. @ 50°C (122° F)	D130		1	
Total Sulfur, wt.%	D1266			
	D2622			
	or D4294		0.047	3
Cetane Number	D613	40		4
Cetane Index	D976	42		
Ash, wt.%	D482		0.01	
Carbon Residue: Ramsbottom				
on 10% Bottom	D524		0.35	
BS&W, vol.%	D1796			
	or equivalent		< 0.05	
Thermal stability, 90 minutes				
300°F Pad rating,				
DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176			
	Procedure 2		2	

* Denotes Change
December, 1994

3.35.2

SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL

Issue No. 3: Grade 74
Cancels Previous Issues of Grade 74

NOTES:

1. Concentration and type of additives permitted only as approved by Colonial.
2. This schedule denotes the fluidity of the distillate at the time and place of use.

Pour Point, °C (°F) - September, October, November, December, January, February, March	Maximum	-18(0)
Pour Point, °C (°F) - April, May, June, July, August	Maximum	-12(+10)
Cloud Point, °C (°F) - September, October, November, December January, February, March	Maximum	-9(+15)
Cloud Point, °C (°F) - April, May, June, July, August	Maximum	-7(+20)

3. Test method D2622 or D4294 must be used to certify sulfur content at origin locations.
4. Where cetane number by test method D613 is not available, test method D976 or D4737 can be used as an approximation. Minimum cetane index of 42 must be met regardless of cetane number.

Julia Dorn

TABLE 1

Constituents, Percent by Volume	MIN	AVG	MAX	Tariff Limits
Hydrogen (H_2)	1			
Methane (CH_4)	94.053	94.571	96.113	
Ethylene (C_2H_4)	1			
Ethane (C_2H)	2.003	3.208	3.704	
Carbon Monoxide	1			
Carbon Dioxide (CO_2) 4	0.7004	0.7345	0.7707	
Nitrogen (N_2) 4	0.44	0.459	0.4793	
Oxygen (O_2)	1			0.25 %
Hydrogen Sulfide (H_2S)	0.016	0.06	0.189	15 grains/Mcf (average)
Sulfur (S)	0.30	0.43	0.59	200 grains/Mcf
Water (H_2O) Vapor	2.0	3.1	6.4	7.0 lb/MMcf
Synthetic Lubricants	2			
Specific Gravity	0.584	0.593	0.603	
Ultimate, Percent by Weight				
Hydrogen	3			
Carbon	3			
Nitrogen	3			
Oxygen	3			
Btu/ft³ @ 60° F and 30" HgA	1027	1049	1061	≥ 1000
Btu/lb of Fuel	3			

Post-it® Fax Note 7671 | Date | # of pages ▶ 1
To Maggie | From Mike
Co./Dept. | Co.
Phone # | Phone #
Fax # | Fax #

1) FGT does not routinely test for these components
2) Lubricants in use on the FGT system contain no PCB's. Traces of oil may be found in the gas stream.
3) These values are not calculated by FGT.
4) The gas cannot contain more than a combined total 3% by volume of CO_2 and/or N_2.

Attachment C

PROCEDURES FOR

STARTUP AND SHUTDOWN

TAKING #2 AND #3 ENGINES OFF DUAL FUEL

1. Put Master Control Switch from "REMOTE" to "LOCAL" Position.
2. Lower Load on Unit to 1000 KW and adjust VARS.
3. Push up on Quick Change Valve, Unit is now on Diesel.
4. Turn Fuel Mode Switch from Dual Fuel to Diesel (ON ENGINE CONTROL BOARD).
5. Open Gas Vent Valve by #1 Cylinder CS Gas Header.

TAKING #2 AND #3 ENGINES OFF LINE

1. Make sure Master Control Switch is in "LOCAL".
2. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.
3. Open Generator Main Breaker, Unit is now off line.
4. Turn Synchronizing Switch on.
5. "Operator" will match GEN Voltmeter with BUS Voltmeter. Turn Voltage Control Mode Switch to "Off" Position. Turn Synchronizing Switch to "OFF" Position.

SHUTTING #2 AND #3 ENGINES DOWN

1. Turn Engine Start/Stop Switch to Stop (ON ENGINE CONTROL PANEL). Turn off Audible Alarm.
2. Put Governor Load Limit to "0".
3. After Engine comes to a complete stop, turn Control Power Off.
4. Run Raw Water Pump for 5 minutes after Shutdown to remove latent engine heat.

Note: IMPORTANT
After an Engine has been Shutdown, wait 10 minutes. Turn on engine control power. Set Governor Load Limit to "0". Turn Engine Start Switch to Start and Roll for 2-3 revolutions tc remove excess oil in the upper pistons.

SECTION III

ENGINE OPERATING PROCEDURES

PRE-STATUS PROCEDURES FOR #2 AND #3 ENGINES

1. Check Surge Tank Water Level.
2. Check Oil Level in Crankcase.
3. Check Oil in Governor and Outboard Bearing.
4. Check Starting Air Pressure should be 190 PSI to 230 PSI.

STARTING #2 AND #3 ENGINES

1. Turn Raw Water Pump #1 or #2 to hand on Power Panelboard. (NOTE: ONLY ONE RAW WATER PUMP IS NEEDED FOR 2 O.P. ENGINES.)

2. Check Control Board to see if Generator Differential Lock-out and Field Breaker are energized. If not, turn Engine Control Power "Off" and Reset.

3. Make sure Master Transfer Switch is in the "LOCAL" Position on Control Board.

4. Turn Auto Synchronizer Switch to the "MANUAL" Position.

5. Turn Voltage Regulator Control Switch to the "OFF" Position.

6. Turn on Engine Control Power (ON ENGINE CONTROL BOARD MAKE SURE "CONTROL" IS AT ENGINE).

7. Set Governor Load Limit accordingly.

8. Prime Fuel System (FUEL PUMP PRIMING HANDLE BEHIND ENGINE CONTROL CABINET) at the same time, Pre-lube Engine for Thirty (30) seconds, then turn Engine Start Switch until Engine comes up to proper RPM.

9. After Engine is running, check all Water, Fuel Oil, Raw Water, Pressure and Temperatures and check for leaks. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumper with your hands.

10. Close Gas Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

SECTION III

ENGINE OPERATING PROCEDURES
FAIRBANKS MORSE TYPE DLA
STARTING PROCEDURE FOR ENGINE #8, #9, #10, #11, #12

PRE-STARTING ENGINE CHECKS

1. Check Surge Tank Water Level.
2. Check Oil Level in Crankcase.
3. Check Oil Level in Governor and Blower Motor.
4. Check Starting Air Pressure.

STARTING PROCEDURE

1. Reset Voltage Relay (for #8,9,10 Engs only) Auxiliary Compartment.
2. Crank Force-Fed Lubricators (50 times Each).
   If Engine has not run for over one week, crank Force-Fed Lubricators 75 to 100 turns.
3. Turn on Fuel Pump (#8 Engine only).
4. Turn on Raw Water Pump to Hand Position.
5. Turn on Jacket Water Pump to Hand Position.
6. Turn on Lube Oil Auxiliary Pump to Hand Position.
7. Open Air Start Valve to Engine.
8. Set Governor Load Limit to 8
9. Check Raw Water Flow, Jacket Water, Lube Oil, and Fuel Pressure. Open Raw Water Valve to Intercooler, 1 turn in warm weather.

11. Turn on Exciter Field Motor, 8-10 Engines only (CHECK BEHIND 4160 SWITCHGEAR TO SEE IF MOTOR IS RUNNING).

12. Set Voltmeter Selector to 1-2-3, check Voltage on all three phases.

13. Put Engine Start Handle to "START", after Engine is up to proper RPM, move it back to "RUN". Close air start valve.

14. SET INCOMING VOLTAGE WITH RUNNING VOLTAGE AND HERTZ.

15. Turn off Auxiliary Lube Oil Pump and make sure Engine Driven Pump is supplying pressure.

    a. Check Outboard Bearing Oil Rings and Blower Oil Pressure.

    b. Check top of Engine for loose nuts, studs, water, oil, fuel leaks. Brush your hand slightly over all start jumper pipe and also on gas jumper pipe. Excessive heat means valves are burned or leaking.

    NOTE: IMPORTANT - THESE JUMPERS ARE MADE OF COPPER AND GET EXTREMELY HOT. DO NOT GRAB HOLD OF THE JUMPER WITH YOUR HANDS.

    Normal alarms on 8-10 ENGINES ONLY.

    c. F.O. Level Abnormal - turn on.

    d. Jacket Water Temperature - turn on.

    e. Jacket Water PSI - turn on.

    f. Lube Oil PSI - turn on.

    g. CC Vacuum PSI - turn on.

    NOTE: (AN ENGINE IN OPERATION SHOULD NEVER BE LEFT ENTIRELY UNATTENDED).

SHUTTING #8-12 ENGINE DOWN

1. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.

2. Open Generator Main Breaker.

3. Match Incoming and Running Voltage.

4. Set Frequency at 60 hertz.

5. Put Start Handle to "STOP", and turn on Auxiliary Lube Oil Pump.

6. After Engine comes to a complete stop, turn off Auxiliary Lube Oil Pump.

7. Turn off Jacket Water Pump.

8. Turn on Generator Heater.

9. Turn off Raw Water Pump.

10. Turn off Fuel Pump (#8 only) and close Raw Water Valve to Intercooler.

FOR ENGS. #8-10 ONLY

11. F.O. Level abnormal - turn off.

12. Jacket Water temperature - turn off.

13. Jacket Water PSI - turn off.

14. Lube oil PSI - turn off.

15. CC Vacuum PSI - turn off.

Also, run all Oil Pumps, Raw Water Pumps, Jacket Water Pumps, for 10 minutes after Shutdown to remove Latent Engine Heat.

SECTION III

ENGINE OPERATING PROCEDURES
FAIRBANKS MORSE TYPE OP ENGINES

PRE-STARTING PROCEDURES FOR #13 THRU #17 ENGINES

1. Check Surge Tank Water Level.

2. Check Oil Level in Crankcase.

3. Check Oil in Governor and Outboard Bearing.

4. Check Starting Air Pressure.

LOCAL STARTING #13 THRU #17 ENGINES

1. Turn on Raw Water Pump #1 or #2 on General Electric Motor Control Center. (NOTE: ONLY ONE RAW WATER PUMP IS NEEDED FOR 5 OP ENGINES).

2. Check Control Board to see if Generator Differential Lock-out and Field Breaker are energized. If not, turn Engine Control Power "Off" and Reset.

3 Turn Voltage Regulator Control Switch to the "Off" Position.

4. Turn on Engine Control Power (ON ENGINE CONTROL BOARD MAKE SURE "CONTROL" IS AT ENGINE).

5. Set Governor Load Limit to "8".

6. Prime Fuel System (FUEL PUMP PRIMING HANDLE BEHIND ENGINE CONTROL CABINET) at the same time, Pre-lube Engine for Thirty (30) seconds, then push Engine Start Button until Engine comes up to proper RPM.

7. After Engine is running, check all Water, Fuel Oil, Raw Water, Pressure and Temperatures and check for leaks. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumper with your hands.

8. Close Gas Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

TAKING #13 THRU #17 ENGINES OFF DUAL FUEL

1. Put Master Control Switch from "REMOTE" to "LOCAL" Position.
2. Lower Load on Unit to 1000 KW and adjust VARS.
3. Push up on Quick Change Valve, Unit is now on Diesel.
4. Turn Fuel Mode Switch from Dual Fuel to Diesel (ON ENGINE CONTROL BOARD).
5. Open Gas Header Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

TAKING #13 THRU #17 ENGINES OFF LINE

1. Make sure Master Control Switch is in "LOCAL".
2. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.
3. Open Generator Main Breaker, Unit is now off line.
4. Put handle in Synchronizing Switch and turn on.
5. "Operator" will match GEN Voltmeter with BUS Voltmeter. Turn Voltage Control Mode Switch to "Off" Position. Turn off Synchronizing Switch.

SHUTTING #13 THRU #17 ENGINES DOWN

1. Turn Alarm and Horn Timers on. Push Stop Button (ON ENGINE CONTROL PANEL).
2. Put Governor Load Limit to "0".
3. After Engine comes to a complete stop, turn Control Power Off,
4. Turn Timers off.

NOTE: IMPORTANT

After an O.P. Engine has been shut down, wait 10 minutes, turn on Engine Control Power. Make sure Governor Load Limit is at "0". Push Engine Start Button and Roll Engine 3 to 4 complete Revolutions to get all excessive oil out of upper pistons.

STARTING PROCEDURES FOR #18 AND #19 ENGINES

1. Open all 20 Compression Cocks on Engine.
2. Open Main Starting Air Valve.
3. Governor Load Limit to "0" Zero.
4. Turn J. W. Pump to Hand Position. Pull Engine Roll Button out and hold - Roll Engine several revolutions and check to make sure no water is coming out of the Compression Cocks. If water is coming out of Compression Cocks, Stop rolling Engine and REPORT it to the Operations Foreman. Engine Oil Pump comes on when you pull Roll Button.
5. Close Main Starting Air Valve.

PRE-START ENGINE CHECKS

1. Close all 20 Compression Cocks.
2. Check Jacket Water Level.
3. Check Lube Oil Level.
4. Check Cooling Tower Level and Valve alignment. Make sure that Feed Water Valve is Open.
5. Check Acid Drum and System. Make sure Valves on their side of PH probe are open.
6. Open Main Fuel Valves at Day Tanks.
7. Put Governor Load Limit at "10" ten. Start/Stop Knob needs to be pulled out AT THE ENGINE.
8. Open Main Starting Air Valve.
9. Set Pump Switches in the following sequence;

   A. Turn Raw Water Pump to AUTO.

   B. Turn Fuel Oil Transfer Pump to AUTO.

C. Turn Cooling Tower Fan to AUTO.

D. Turn Fuel Oil Booster Pump to AUTO.

E. Turn Jacket Water Pump to AUTO.

F. Select either L. O. Pump 1 or 2 and turn Switch to AUTO.

G. Turn L.O. Keep Warm Pump Off.

H. Push Engine Start Button. NOTE - Start Button must be pushed within 10 sec. of turning L. O. Pump to AUTO or System will automatically switch to Pump 2. Should Engine be started in this condition Pump 2 will continue to run no matter where you put the Pump Select Switch until Engine is stopped, All Pumps turned Off and the Start Button Pushed.

Should Engine fail to start the MIS-START MOTOR CONTROLS FUNCTION light will come on. To clear, turn All Pumps Off, Close Main Air Start Valve and Push Start Button. This activates a 2 1/2 minute timer. After Timer times out repeat step 8 to Start Engine.

I. Pull Fuel Rack Handle Open. After Engine is running, Close Main Air Start Valve. Check all Pressures and Temperatures on Engine. Check Oil circulation on Pedestal Bearing. Check Brushes on Generator Slip Ring. Check top of Engine, Left and Right Banks for Leaks, Broken Bolts, Cable tightness, etc. Make a Visual Inspection of all systems. (4 times a shift)

PUTTING #18 & #19 ON LINE

1. Close Engine Lockout Relay.

2. Close Generator Lockout Relay.

3. Close Generator Field Breaker Control Switch.

4. Turn Synchronizing Switch ON.

5. Bring Running Voltage up Slowly to Match Incoming Voltage.

SHUTTING #18 & #19 ENGINE DOWN

1. Lower Load per GENERAL INSTRUCTIONS on Page 2A to 4000 KW and take Unit off Dual Fuel by turning Fuel Selector to DIESEL. Close Main Gas Valve. Engine is now on Diesel.

2. Continue Lowering Load to per Step 1. Let Engine idle a minimum of five minutes prior to opening Generator Breaker.

3. Push Engine Control Stop Button on Breaker Panel or Push Stop Button on Gauge Board or Push Start/Stop Knob in at Engine.

4. Let Pumps run for 5 to 10 minutes to cool all bearings down.

5. Turn Off all Pumps.

6. Turn On L.O. Keep Warm Pump.

7. Close Fuel Supply Valves to Day Tanks.

"EMERGENCY" Switch Over from Gas to Diesel is accomplished by Closing the Main Gas Valve.

#18 & #19 OPERATING PROCEDURES

1. When Engine is Running, walk up on top of Engine and Check both Left and Right Banks for broken bolts, cable tightness and leaks. (4 TIMES A SHIFT)

2. Check Cooling Tower to make sure water is flowing through all water holes on top of tower. Also check Acid Pump and Drum Level. (2 TIMES PER SHIFT)

3. Check Oil Pumps and Heat Exchangers in Basement. (2 TIMES PER SHIFT)

4. Check Fuel Oil Day Tanks. (HOURLY)

5. Check Oil Level in Governor. (2 TIMES PER SHIFT)

6. Check Lube Oil Sump Tank Level when Engine is Logged.

7. Check oil circulation on pedestal bearing slip rings hourly.

8. Make hourly and daily Engine checks per Engine Check List. Engine Operator will be responsible for signing off that all Engine checks have been made during his shift.

STARTING #20 AND #21 ENGINES

1. Open Main Fuel Valve to Day Tanks. Make sure Control Mode is in "LOCAL" position (ON SWITCHGEAR).

1A. At the Switchgear Panel " Verify the following" - No Flags are indicated on Protection Relays and the Voltage Regulator Control Switch is in the "Off" Position.

2. Turn Jacket Water Pump to Hand Run.

3. Turn I.C.W. Water Pump to Hand Run.

4. Turn F.O. Supply Pump to Hand Run.

5. Turn Crank Case Vacuum Pump to Hand Run.

6. Turn AUX L.O. Pump to Hand Run. Note: Check Oil Level in Aux. L.O. Pump Drive Units before starting.

7. Turn Fan #1 J.W. Radiator to auto. NOTE: Check Oil in Radiator Fan Drive Units before starting.

8. Turn Fan #1 I.C.W. Radiator to Auto.

9. Turn F.O. Transfer Pump to Auto.

10. Turn Rocker L.O. Pump to Hand Run.

11. Turn Fan #2 J.W. Radiator to Auto.

12. Turn Fan #2 I.C.W. Radiator to Auto.

13. Open Main Air Start Supply to Engine.

14. Set Governor Load Limit to 10.

15. Check all Water, Oil, Fuel, Raw Water Pressure and Temperature.

16. Wait until Lube Oil Ppressure at Lube Oil Pump discharge is over 60 lbs. and Engine Header is over 60 lbs. (NOTE BEFORE STARTING UNITS).

17. Double check everything out before starting.

18. Turn Engine Start Switch to "Start" and hold until the first ignitions take place, release Start Switch, shutting off starting air.

19. Close Main Air Start Supply Valve to engine.

20. Check Outboard Bearing, Turbo's Rocker Lube Oil Level, Raw Water, Jacket Water, Fuel, Oil Level in Gear Boxes on Fan's, Pressure and Level Temperatures. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumpers with your hand.

21. Turn AUX L.O. Pump to AUTO, after Oil Inlet Header Pressure reaches 60 PSI.

22. Turn Rocker L.O. pump to AUTO.

23. Raise Engine speed to 514 RPM. Unit is ready to go on line (AFTER PRESSURE CIRCUIT ARMED LIGHT IS LIT).

SECTION III

SHUTTING #20 AND #21 ENGINES DOWN

1. Turn AUX L.O. pump to hand run.
2. Turn rocker L.O. pump to hand run.
3. Push Stop Button on Engine Control Panel.

After Engine comes to a complete stop:

"Run all oil pumps, jacket water pumps, for 10 minutes after shutdown to remove latent engine heat."

4. Turn off J.W. Pump.
5. Turn off I.C.W. Pump.
6. Turn off F.O. Supply Pump.
7. Turn off C. CASE Vacuum Pump.
8. Turn off AUX L.O. Pump.
9. Turn off Fan #1 J.W. Radiator.
10. Turn off Fan #1 I.C.W. Radiator.
11. Turn off F.O. Transfer Pump.
12. Turn off Fan #2 J.W. Radiator.
13. Turn off Fan #2 I.C.W. Radiator.
14. Close Main Fuel Valve to Day Tanks.

Attachment D

ADDITIONAL APPLICABLE REQUIREMENTS

Additional applicable requirements for units 2, 3, and 8 through 21 (002, 003, 008-021) and the associated compliance methods, recordkeeping, and monitoring requirements are set forth in the current operating permit, attached.

METROPOLITAN DADE COUNTY, FLORIDA

METRODADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
33 S.W. 2nd AVENUE
MIAMI, FLORIDA 33130-1540
(305) 372-6789

AIR EMISSIONS
ANNUAL OPERATING PERMIT

PERMITTEE:
Mr. James L. Swarts
GORDON W. IVEY MUN. POWER PLANT
675 N FLAGLER AVE
HOMESTEAD, FL 33030

PERMIT No.: AP-00145 (A3)/MSP-00541-93 08
SOURCE NAME: GORDON W. IVEY MUN. POWER PLANT
LOCATION: 675 N FLAGLER AVE
HOMESTEAD, FL 33030

DESCRIPTION OF FACILITY/EQUIPMENT:

POWER GENERATING FACILITY

Eighteen internal combustion engines for generating electric power using both, natural gas and #2 fuel oil.

SPECIFIC CONDITIONS:

01 No visible emissions equal to or greater than 20% opacity permitted from this facility.

02 No objectionable odor is allowed.

GENERAL CONDITIONS:

03 The applicant, by acceptance of this document, agrees to operate and maintain the subject operation so as to comply with the requirements and standards of Chapter 24 of the Code of Metropolitan Dade County.

04 If for any reason, the applicant does not comply with or will be unable to comply with any condition or limitation specified on this document the applicant shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps taken to reduce, eliminate, and prevent recurrance of the non-compliance. The applicant shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this document.

05 As provided in Section 24-30 of the Code of Metropolitan Dade County, the prior written approval of the Department of Environmental Resources Management shall be obtained for any alteration to this facility.

06 The issuance of this document does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. Nor does it relieve the applicant from liability for harm or injury to human health or welfare or property.

07 This document is required to be posted in a conspicuous location at the pollution control facility site during the entire period of operation.

08 This document is not transferable. Upon sale or legal transfer of the property or facility covered by this document, the applicant shall notify the department within thirty(30) days. The new owner must apply for a permit within thirty (30) days. The applicant shall be liable for any non-compliance of the source until the transferree applies for and receives a transfer of this document.

09 The applicant, by acceptance of this document, specifically agrees to allow access to the named source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this document and department rules.

10 This document does not indicate a waiver of or approval of any other department permit that may be required for other aspects of this facility.

Section Approval: E Quadrson

11 This document does not constitute an approval by DERM or certification that the applicant is in compliance with applicable laws, ordinances, rules or regulations. The applicant acknowledges that separate enforcement actions may be initiated by DERM and that this document does not constitute compliance with orders issued in conjunction with enforcement actions for correction of violations.

12 Failure to comply with any condition of this document, or the standards as set forth in Chapter 24, Code of Metropolitan Dade County may subject the applicant to the penalty provisions of said Chapter including civil penalties up to $25,000 per day per offense and/or criminal penalties of $500 per day and/or sixty (60) days in jail.

0250013

Owner/Authorized Representative or Responsible Official

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

Name : James L. Swartz
Title : Director of Utilities

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

Organization/Firm : City of Homestead
Street Address : 675 N. Flagler Ave.
City : Homestead
State : FL Zip Code : 33030-____

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

Telephone : (305)247-1801 Fax : (305)247-4008

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

James L. Swartz
Signature

June 7, 96
Date

* Attach letter of authorization if not currently on file.

4. Professional Engineer Statement :

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

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

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

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

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

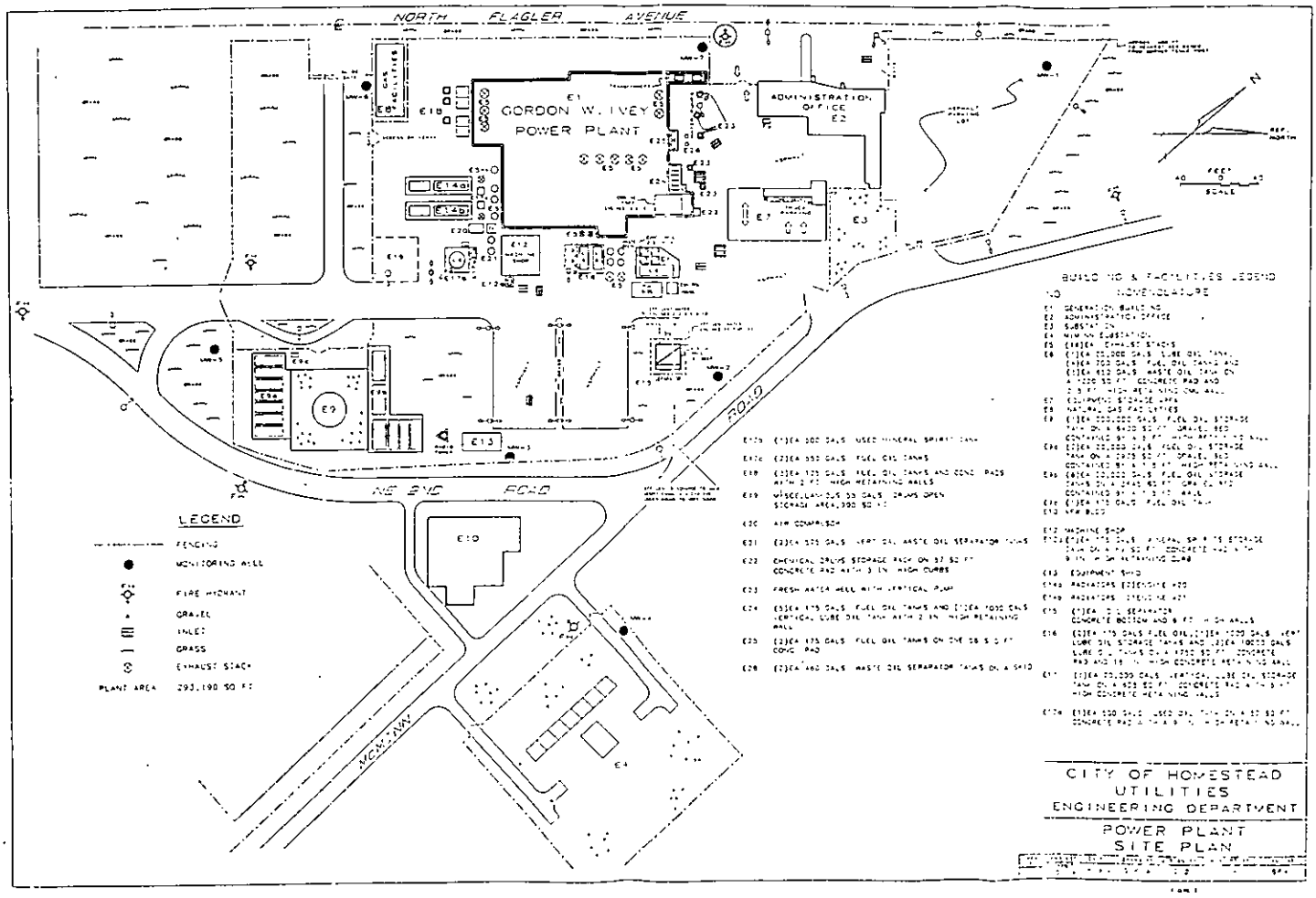
If the purpose of this application is to obtain an initial air operation permit or operation permi revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions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

Signature

May 31, 1996
Date

* Attach any exception to certification statement.

ATTACHMENTS AND FIGURES


NORTH FLAGLER AVENUE
GORDON W. IVEY
POWER PLANT
ADMINISTRATION OFFICE
E2
E1
E3
E4
E5
E6
E7
E8
E9
E10
E11
E12
E13
E14a
E14b
NE 2ND ROAD
NE 2ND ROAD
MCKINNAN
LEGEND
FENCING
MONITORING WELL
FIRE HYDRANT
GRAVEL
INLET
GRASS
EXHAUST STACK
PLANT AREA 293,190 SQ FT
BUILDINGS & FACILITIES LEGEND
NO NOMENCLATURE
E1 GENERATION BUILDING
E2 ADMINISTRATION OFFICE
E3 SUBSTATION
E4 MIMIC SUBSTATION
E5 (2)EA EXHAUST STACKS
E6 (2)EA 12,000 GALS LUBE OIL TANKS
(4)EA 700 GALS FUEL OIL TANKS AND
(2)EA 412 GALS WASTE OIL TANK ON
A 1220 SQ FT CONCRETE PAD AND
2.5 FT HIGH METAL MIMIC WALL
E7 EQUIPMENT STORAGE AREA
E8 NATURAL GAS PAD METERS
E9 (2)EA 500,000 GALS FUEL OIL STORAGE
TANK ON A 6400 SQ FT GRAVEL BED
CONTAINED BY A 3.5 FT HIGH REINFORCED CONCRETE WALL
E9a (2)EA 20,000 GALS FUEL OIL STORAGE
TANK ON A 2925 SQ FT GRAVEL BED
CONTAINED BY A 1.5 FT HIGH REINFORCED CONCRETE WALL
E9b (4)EA 10,000 GALS FUEL OIL STORAGE
TANKS ON A 2645 SQ FT GRAVEL BED
CONTAINED BY A 1.5 FT HIGH REINFORCED CONCRETE WALL
E10 (1)EA 175 GALS FUEL OIL TANK
E11 VAN BLDG
E12 MACHINE SHOP
E12a (2)EA 175 GALS WASTE OIL STORAGE
TANK ON A 64 SQ FT CONCRETE PAD WITH
9 IN HIGH RETAINING CURB
E13 EQUIPMENT SHED
E14a RADIATORS (2)EXISTING
E14b RADIATORS (2)EXISTING
E15 (2)EA OIL SEPARATOR
CONCRETE BOTTOM AND 6 FT HIGH WALLS
E16 (2)EA 175 GALS FUEL OIL (2)EA 1000 GALS HEAVY
LUBE OIL STORAGE TANKS AND (2)EA 10000 GALS
LUBE OIL TANKS ON A 4750 SQ FT CONCRETE
PAD AND 18 IN HIGH CONCRETE RETAINING WALL
E17 (2)EA 20,000 GALS VERTICAL USE OIL STORAGE
TANK ON A 923 SQ FT CONCRETE PAD WITH 3 FT
HIGH CONCRETE RETAINING WALLS
E17a (1)EA 500 GALS USED OIL TANK ON A 32 SQ FT
CONCRETE PAD WITH 6 IN HIGH RETAINING WALL
E18 (1)EA 300 GALS USED MINERAL SPIRIT TANK
E18a (2)EA 550 GALS FUEL OIL TANKS
E19 (2)EA 125 GALS FUEL OIL TANKS AND CONC PADS
WITH 2 FT HIGH RETAINING WALLS
E19 MISCELLANEOUS 55 GALS DRUMS OPEN
STORAGE AREA 1,200 SQ FT
E20 AIR COMPRESSOR
E21 (2)EA 525 GALS VERT OIL WASTE OIL SEPARATOR TANKS
E22 CHEMICAL DRUMS STORAGE RACK ON 37.52 FT
CONCRETE PAD WITH 3 IN HIGH CURBS
E23 FRESH WATER WELL WITH VERTICAL PUMP
E24 (3)EA 175 GALS FUEL OIL TANKS AND (1)EA 1000 GALS
VERTICAL CUBE OIL TANK WITH 2 IN HIGH RETAINING
WALL
E25 (2)EA 175 GALS FUEL OIL TANKS ON ONE 58 S.F.
CONC PAD
E26 (2)EA 460 GALS WASTE OIL SEPARATOR TANKS ON A SKID
CITY OF HOMESTEAD
UTILITIES
ENGINEERING DEPARTMENT
POWER PLANT
SITE PLAN

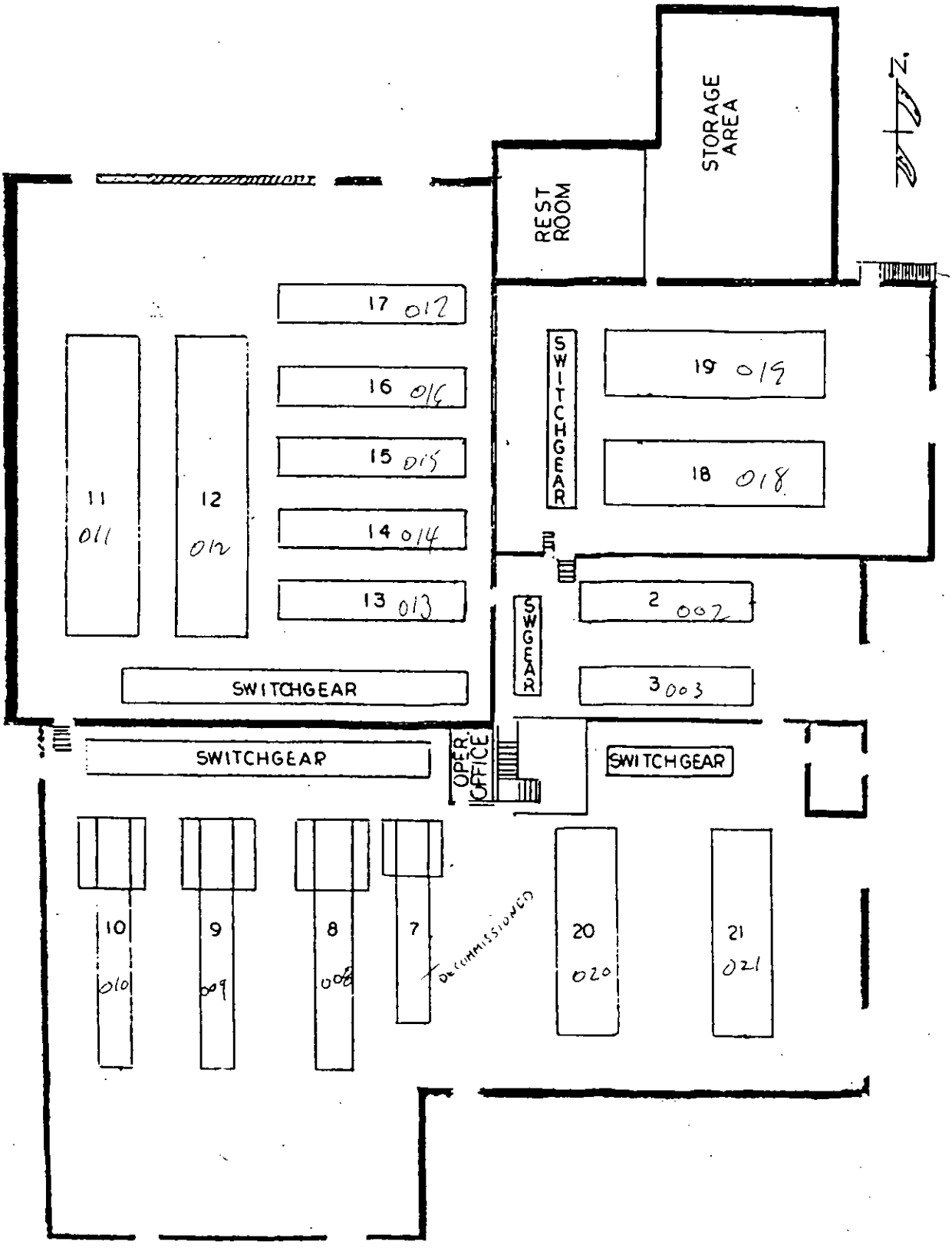
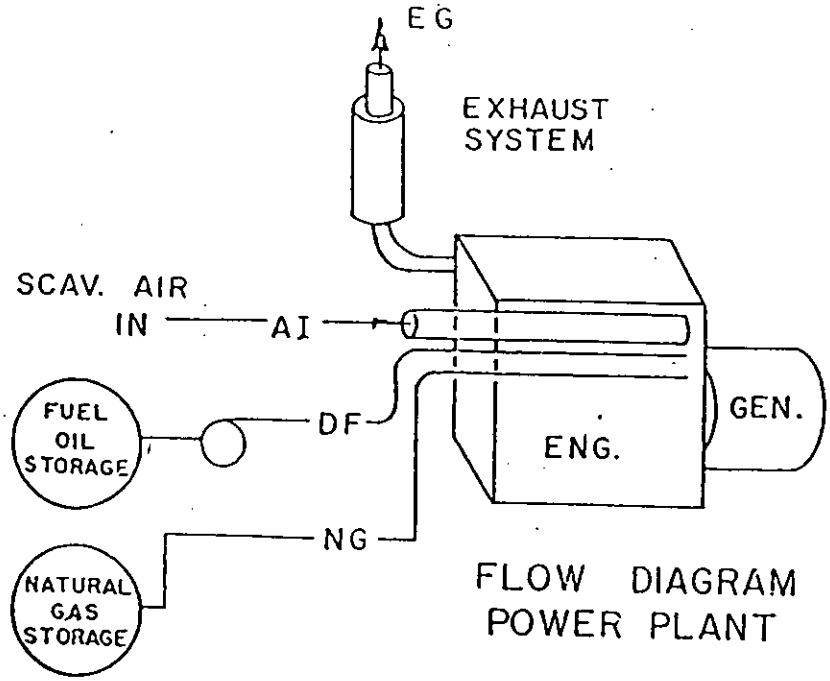
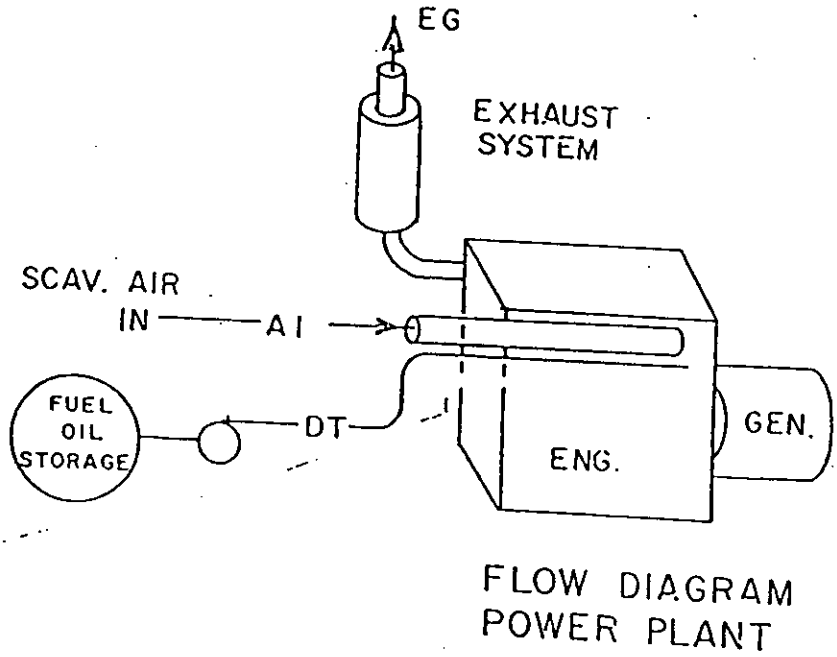

STORAGE AREA
REST ROOM
17 017
16 016
15 015
14 014
13 013
11 011
12 012
SWITCHGEAR
19 019
18 018
2 002
3 003
SWGEAR
SWITCHGEAR
OPER. OFFICE
SWITCHGEAR
10 010
9 009
8 008
7
DECOMMISSIONED
20 020
21 021

FIGURE 2



TYPICAL FOR DUAL FUEL UNITS



TYPICAL FOR OIL UNITS

Figure 3

Attachment A

COMPLIANCE STATEMENT

I, the undersigned, and the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on infromation and belief formed after resonable inquirey, that the statements made and data contained in this report are true, accurate, and complete."

James L. Swartz
Director of Utilities

h:\005186\00-00099\hmststat.wk4

Attachment B

Fuel Analyses for Natural Gas and No. 2 Fuel Oil

Colonial Pipeline Company

3.35.1

SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL

Issue No. 3: Grade 74
Cancels Previous Issues of Grade 74

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500		2.5	
Color Visual		Undyed		
Viscosity, cSt @ 38°C (100°F)	D445	2.0	3.6	
Pour Point	D97			2
Cloud Point	D2500			2
Corrosion, 3 hrs. @ 50°C (122° F)	D130		1	
Total Sulfur, wt.%	D1266			
	D2622			
	or D4294		0.047	3
Cetane Number	D613	40		4
Cetane Index	D976	42		
Ash, wt.%	D482		0.01	
Carbon Residue: Ramsbottom				
on 10% Bottom	D524		0.35	
BS&W, vol.%	D1796			
	or equivalent		< 0.05	
Thermal stability, 90 minutes				
300°F Pad rating,				
DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176			
	Procedure 2		2	

* Denotes Change
December, 1994

3.35.2 SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL

Issue No. 3: Grade 74
Cancels Previous Issues of Grade 74

NOTES:

1. Concentration and type of additives permitted only as approved by Colonial.
2. This schedule denotes the fluidity of the distillate at the time and place of use.

Pour Point, °C (°F) - September, October, November, December, January, February, March	Maximum	-18(0)
Pour Point, °C (°F) - April, May, June, July, August	Maximum	-12(+10)
Cloud Point, °C (°F) - September, October, November, December January, February, March	Maximum	-9(+15)
Cloud Point, °C (°F) - April, May, June, July, August	Maximum	-7(+20)

3. Test method D2622 or D4294 must be used to certify sulfur content at origin locations.
4. Where cetane number by test method D613 is not available, test method D976 or D4737 can be used as an approximation. Minimum cetane index of 42 must be met regardless of cetane number.

Julia Dorn

TABLE 1

Constituents, Percent by Volume	MIN	AVG	MAX	Tariff Limits
Hydrogen (H_2)	*1*			
Methane (CH_4)	94.053	94.571	96.113	
Ethylene (C_2H_4)	*1*			
Ethane (C_2H)	2.003	3.208	3.704	
Carbon Monoxide	*1*			
Carbon Dioxide (CO_2) *4*	0.7004	0.7345	0.7707	
Nitrogen (N_2) *4*	0.44	0.459	0.4793	
Oxygen (O_2)	*1*			0.25 %
Hydrogen Sulfide (H_2S)	0.016	0.06	0.189	15 grains/Mcf
Sulfur (S)	0.30	0.43	0.59	200 grains/Mcf
Water (H_2O) Vapor	2.0	3.1	6.4	7.0 lb/MMcf
Synthetic Lubricants	*2*			
Specific Gravity	0.584	0.593	0.603	
Ultimate, Percent by Weight				
Hydrogen	*3*			
Carbon	*3*			
Nitrogen	*3*			
Oxygen	*3*			
Btu/ft^3 @ 60° F and 30" HgA	1027	1049	1061	≥ 1000
Btu/lb of Fuel	*3*			

Post-it® Fax Note 7671 | Date | # of pages ▶ 1
To Maggie | From Mike
Co./Dept. | Co.
Phone # | Phone #
Fax # | Fax #

1) FGT does not routinely test for these components
2) Lubricants in use on the FGT system contain no PCB's. Traces of oil may be found in the gas stream.
3) These values are not calculated by FGT.
4) The gas cannot contain more than a combined total 3% by volume of CO_2 and/or N_2.

Attachment C

PROCEDURES FOR

STARTUP AND SHUTDOWN

TAKING #2 AND #3 ENGINES OFF DUAL FUEL

1. Put Master Control Switch from "REMOTE" to "LOCAL" Position.
2. Lower Load on Unit to 1000 KW and adjust VARS.
3. Push up on Quick Change Valve, Unit is now on Diesel.
4. Turn Fuel Mode Switch from Dual Fuel to Diesel (ON ENGINE CONTROL BOARD).
5. Open Gas Vent Valve by #1 Cylinder CS Gas Header.

TAKING #2 AND #3 ENGINES OFF LINE

1. Make sure Master Control Switch is in "LOCAL".
2. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.
3. Open Generator Main Breaker, Unit is now off line.
4. Turn Synchronizing Switch on.
5. "Operator" will match GEN Voltmeter with BUS Voltmeter. Turn Voltage Control Mode Switch to "Off" Position. Turn Synchronizing Switch to "OFF" Position.

SHUTTING #2 AND #3 ENGINES DOWN

1. Turn Engine Start/Stop Switch to Stop (ON ENGINE CONTROL PANEL). Turn off Audible Alarm.
2. Put Governor Load Limit to "0".
3. After Engine comes to a complete stop, turn Control Power Off.
4. Run Raw Water Pump for 5 minutes after Shutdown to remove latent engine heat.

Note: IMPORTANT
After an Engine has been Shutdown, wait 10 minutes. Turn on engine control power. Set Governor Load Limit to "0". Turn Engine Start Switch to Start and Roll for 2-3 revolutions to remove excess oil in the upper pistons.

SECTION III

ENGINE OPERATING PROCEDURES

PRE-STATUS PROCEDURES FOR #2 AND #3 ENGINES

1. Check Surge Tank Water Level.
2. Check Oil Level in Crankcase.
3. Check Oil in Governor and Outboard Bearing.
4. Check Starting Air Pressure should be 190 PSI to 230 PSI.

STARTING #2 AND #3 ENGINES

1. Turn Raw Water Pump #1 or #2 to hand on Power Panelboard. (NOTE: ONLY ONE RAW WATER PUMP IS NEEDED FOR 2 O.P. ENGINES.)

2. Check Control Board to see if Generator Differential Lock-out and Field Breaker are energized. If not, turn Engine Control Power "Off" and Reset.

3. Make sure Master Transfer Switch is in the "LOCAL" Position on Control Board.

4. Turn Auto Synchronizer Switch to the "MANUAL" Position.

5. Turn Voltage Regulator Control Switch to the "OFF" Position.

6. Turn on Engine Control Power (ON ENGINE CONTROL BOARD MAKE SURE "CONTROL" IS AT ENGINE).

7. Set Governor Load Limit accordingly.

8. Prime Fuel System (FUEL PUMP PRIMING HANDLE BEHIND ENGINE CONTROL CABINET) at the same time, Pre-lube Engine for Thirty (30) seconds, then turn Engine Start Switch until Engine comes up to proper RPM.

9. After Engine is running, check all Water, Fuel Oil, Raw Water, Pressure and Temperatures and check for leaks. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumper with your hands.

10. Close Gas Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

ENGINE OPERATING PROCEDURES
FAIRBANKS MORSE TYPE DLA
STARTING PROCEDURE FOR ENGINE #8, #9, #10, #11, #12

PRE-STARTING ENGINE CHECKS

1. Check Surge Tank Water Level.
2. Check Oil Level in Crankcase.
3. Check Oil Level in Governor and Blower Motor.
4. Check Starting Air Pressure.

STARTING PROCEDURE

1. Reset Voltage Relay (for #8,9,10 Engs only) Auxiliary Compartment.
2. Crank Force-Fed Lubricators (50 times Each).
   If Engine has not run for over one week, crank Force-Fed Lubricators 75 to 100 turns.
3. Turn on Fuel Pump (#8 Engine only).
4. Turn on Raw Water Pump to Hand Position.
5. Turn on Jacket Water Pump to Hand Position.
6. Turn on Lube Oil Auxiliary Pump to Hand Position.
7. Open Air Start Valve to Engine.
8. Set Governor Load Limit to 8
9. Check Raw Water Flow, Jacket Water, Lube Oil, and Fuel Pressure. Open Raw Water Valve to Intercooler, 1 turn in warm weather.

11. Turn on Exciter Field Motor, 8-10 Engines only (CHECK BEHIND 4160 SWITCHGEAR TO SEE IF MOTOR IS RUNNING).

12. Set Voltmeter Selector to 1-2-3, check Voltage on all three phases.

13. Put Engine Start Handle to "START", after Engine is up to proper RPM, move it back to "RUN". Close air start valve.

14. SET INCOMING VOLTAGE WITH RUNNING VOLTAGE AND HERTZ.

15. Turn off Auxiliary Lube Oil Pump and make sure Engine Driven Pump is supplying pressure.

a. Check Outboard Bearing Oil Rings and Blower Oil Pressure.

b. Check top of Engine for loose nuts, studs, water, oil, fuel leaks. Brush your hand slightly over all start jumper pipe and also on gas jumper pipe. Excessive heat means valves are burned or leaking.

NOTE: IMPORTANT - THESE JUMPERS ARE MADE OF COPPER AND GET EXTREMELY HOT. DO NOT GRAB HOLD OF THE JUMPER WITH YOUR HANDS.

Normal alarms on 8-10 ENGINES ONLY.

c. F.O. Level Abnormal - turn on.

d. Jacket Water Temperature - turn on.

e. Jacket Water PSI - turn on.

f. Lube Oil PSI - turn on.

g. CC Vacuum PSI - turn on.

NOTE: (AN ENGINE IN OPERATION SHOULD NEVER BE LEFT ENTIRELY UNATTENDED).

SHUTTING #8-12 ENGINE DOWN

1. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.
2. Open Generator Main Breaker.
3. Match Incoming and Running Voltage.
4. Set Frequency at 60 hertz.
5. Put Start Handle to "STOP", and turn on Auxiliary Lube Oil Pump.
6. After Engine comes to a complete stop, turn off Auxiliary Lube Oil Pump.
7. Turn off Jacket Water Pump.
8. Turn on Generator Heater.
9. Turn off Raw Water Pump.
10. Turn off Fuel Pump (#8 only) and close Raw Water Valve to Intercooler.

FOR ENGS. #8-10 ONLY

11. F.O. Level abnormal - turn off.
12. Jacket Water temperature - turn off.
13. Jacket Water PSI - turn off.
14. Lube oil PSI - turn off.
15. CC Vacuum PSI - turn off.

Also, run all Oil Pumps, Raw Water Pumps, Jacket Water Pumps, for 10 minutes after Shutdown to remove Latent Engine Heat.

SECTION III

ENGINE OPERATING PROCEDURES
FAIRBANKS MORSE TYPE OP ENGINES

PRE-STARTING PROCEDURES FOR #13 THRU #17 ENGINES

1. Check Surge Tank Water Level.
2. Check Oil Level in Crankcase.
3. Check Oil in Governor and Outboard Bearing.
4. Check Starting Air Pressure.

LOCAL STARTING #13 THRU #17 ENGINES

1. Turn on Raw Water Pump #1 or #2 on General Electric Motor Control Center. (NOTE: ONLY ONE RAW WATER PUMP IS NEEDED FOR 5 OP ENGINES).
2. Check Control Board to see if Generator Differential Lock-out and Field Breaker are energized. If not, turn Engine Control Power "Off" and Reset.
3 Turn Voltage Regulator Control Switch to the "Off" Position.
4. Turn on Engine Control Power (ON ENGINE CONTROL BOARD MAKE SURE "CONTROL" IS AT ENGINE).
5. Set Governor Load Limit to "8".
6. Prime Fuel System (FUEL PUMP PRIMING HANDLE BEHIND ENGINE CONTROL CABINET) at the same time, Pre-lube Engine for Thirty (30) seconds, then push Engine Start Button until Engine comes up to proper RPM.
7. After Engine is running, check all Water, Fuel Oil, Raw Water, Pressure and Temperatures and check for leaks. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumper with your hands.
8. Close Gas Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

TAKING #13 THRU #17 ENGINES OFF DUAL FUEL

1. Put Master Control Switch from "REMOTE" to "LOCAL" Position.
2. Lower Load on Unit to 1000 KW and adjust VARS.
3. Push up on Quick Change Valve, Unit is now on Diesel.
4. Turn Fuel Mode Switch from Dual Fuel to Diesel (ON ENGINE CONTROL BOARD).
5. Open Gas Header Vent Valve (BY #1 CYL C.S. ON GAS HEADER).

TAKING #13 THRU #17 ENGINES OFF LINE

1. Make sure Master Control Switch is in "LOCAL".
2. Lower Engine Load in accordance with Section Two (2), Engine Loading/Unloading Instructions.
3. Open Generator Main Breaker, Unit is now off line.
4. Put handle in Synchronizing Switch and turn on.
5. "Operator" will match GEN Voltmeter with BUS Voltmeter. Turn Voltage Control Mode Switch to "Off" Position. Turn off Synchronizing Switch.

SHUTTING #13 THRU #17 ENGINES DOWN

1. Turn Alarm and Horn Timers on. Push Stop Button (ON ENGINE CONTROL PANEL).
2. Put Governor Load Limit to "0".
3. After Engine comes to a complete stop, turn Control Power Off,
4. Turn Timers off.

NOTE: IMPORTANT

After an O.P. Engine has been shut down, wait 10 minutes, turn on Engine Control Power. Make sure Governor Load Limit is at "0". Push Engine Start Button and Roll Engine 3 to 4 complete Revolutions to get all excessive oil out of upper pistons.

STARTING PROCEDURES FOR #18 AND #19 ENGINES

1. Open all 20 Compression Cocks on Engine.
2. Open Main Starting Air Valve.
3. Governor Load Limit to "O" Zero.
4. Turn J. W. Pump to Hand Position. Pull Engine Roll Button out and hold - Roll Engine several revolutions and check to make sure no water is coming out of the Compression Cocks. If water is coming out of Compression Cocks, Stop rolling Engine and REPORT it to the Operations Foreman. Engine Oil Pump comes on when you pull Roll Button.
5. Close Main Starting Air Valve.

PRE-START ENGINE CHECKS

1. Close all 20 Compression Cocks.
2. Check Jacket Water Level.
3. Check Lube Oil Level.
4. Check Cooling Tower Level and Valve alignment. Make sure that Feed Water Valve is Open.
5. Check Acid Drum and System. Make sure Valves on their side of PH probe are open.
6. Open Main Fuel Valves at Day Tanks.
7. Put Governor Load Limit at "10" ten. Start/Stop Knob needs to be pulled out AT THE ENGINE.
8. Open Main Starting Air Valve.
9. Set Pump Switches in the following sequence;
   A. Turn Raw Water Pump to AUTO.
   B. Turn Fuel Oil Transfer Pump to AUTO.

C. Turn Cooling Tower Fan to AUTO.

D. Turn Fuel Oil Booster Pump to AUTO.

E. Turn Jacket Water Pump to AUTO.

F. Select either L. O. Pump 1 or 2 and turn Switch to AUTO.

G. Turn L.O. Keep Warm Pump Off.

H. Push Engine Start Button. NOTE - Start Button must be pushed within 10 sec. of turning L. O. Pump to AUTO or System will automatically switch to Pump 2. Should Engine be started in this condition Pump 2 will continue to run no matter where you put the Pump Select Switch until Engine is stopped, All Pumps turned Off and the Start Button Pushed.

Should Engine fail to start the MIS-START MOTOR CONTROLS FUNCTION light will come on. To clear, turn All Pumps Off, Close Main Air Start Valve and Push Start Button. This activates a 2 1/2 minute timer. After Timer times out repeat step 8 to Start Engine.

I. Pull Fuel Rack Handle Open. After Engine is running, Close Main Air Start Valve. Check all Pressures and Temperatures on Engine. Check Oil circulation on Pedestal Bearing. Check Brushes on Generator Slip Ring. Check top of Engine, Left and Right Banks for Leaks, Broken Bolts, Cable tightness, etc. Make a Visual Inspection of all systems. (4 times a shift)

PUTTING #18 & #19 ON LINE

1. Close Engine Lockout Relay.

2. Close Generator Lockout Relay.

3. Close Generator Field Breaker Control Switch.

4. Turn Synchronizing Switch ON.

5. Bring Running Voltage up Slowly to Match Incoming Voltage.

SHUTTING #18 & #19 ENGINE DOWN

1. Lower Load per GENERAL INSTRUCTIONS on Page 2A to 4000 KW and take Unit off Dual Fuel by turning Fuel Selector to DIESEL. Close Main Gas Valve. Engine is now on Diesel.

2. Continue Lowering Load to per Step 1. Let Engine idle a minimum of five minutes prior to opening Generator Breaker.

3. Push Engine Control Stop Button on Breaker Panel or Push Stop Button on Gauge Board or Push Start/Stop Knob in at Engine.

4. Let Pumps run for 5 to 10 minutes to cool all bearings down.

5. Turn Off all Pumps.

6. Turn On L.O. Keep Warm Pump.

7. Close Fuel Supply Valves to Day Tanks.

"EMERGENCY" Switch Over from Gas to Diesel is accomplished by Closing the Main Gas Valve.

#18 & #19 OPERATING PROCEDURES

1. When Engine is Running, walk up on top of Engine and Check both Left and Right Banks for broken bolts, cable tightness and leaks. (4 TIMES A SHIFT)

2. Check Cooling Tower to make sure water is flowing through all water holes on top of tower. Also check Acid Pump and Drum Level. (2 TIMES PER SHIFT)

3. Check Oil Pumps and Heat Exchangers in Basement. (2 TIMES PER SHIFT)

4. Check Fuel Oil Day Tanks. (HOURLY)

5. Check Oil Level in Governor. (2 TIMES PER SHIFT)

6. Check Lube Oil Sump Tank Level when Engine is Logged.

7. Check oil circulation on pedestal bearing slip rings hourly.

8. Make hourly and daily Engine checks per Engine Check List. Engine Operator will be responsible for signing off that all Engine checks have been made during his shift.

SECTION III

STARTING #20 AND #21 ENGINES

1. Open Main Fuel Valve to Day Tanks. Make sure Control Mode is in "LOCAL" position (ON SWITCHGEAR).

1A. At the Switchgear Panel " Verify the following" - No Flags are indicated on Protection Relays and the Voltage Regulator Control Switch is in the "Off" Position.

2. Turn Jacket Water Pump to Hand Run.

3. Turn I.C.W. Water Pump to Hand Run.

4. Turn F.O. Supply Pump to Hand Run.

5. Turn Crank Case Vacuum Pump to Hand Run.

6. Turn AUX L.O. Pump to Hand Run. Note: Check Oil Level in Aux. L.O. Pump Drive Units before starting.

7. Turn Fan #1 J.W. Radiator to auto. NOTE: Check Oil in Radiator Fan Drive Units before starting.

8. Turn Fan #1 I.C.W. Radiator to Auto.

9. Turn F.O. Transfer Pump to Auto.

10. Turn Rocker L.O. Pump to Hand Run.

11. Turn Fan #2 J.W. Radiator to Auto.

12. Turn Fan #2 I.C.W. Radiator to Auto.

13. Open Main Air Start Supply to Engine.

14. Set Governor Load Limit to 10.

15. Check all Water, Oil, Fuel, Raw Water Pressure and Temperature.

16. Wait until Lube Oil Ppressure at Lube Oil Pump discharge is over 60 lbs. and Engine Header is over 60 lbs. (NOTE BEFORE STARTING UNITS).

17. Double check everything out before starting.

18. Turn Engine Start Switch to "Start" and hold until the first ignitions take place, release Start Switch, shutting off starting air.

19. Close Main Air Start Supply Valve to engine.

20. Check Outboard Bearing, Turbo's Rocker Lube Oil Level, Raw Water, Jacket Water, Fuel, Oil Level in Gear Boxes on Fan's, Pressure and Level Temperatures. Brush your hand slightly over Air Start Jumper Pipe. Excessive heat means valves are burned or leaking. NOTE: IMPORTANT - These jumpers are made of copper and get extremely "HOT". Do not grab hold of the jumpers with your hand.

21. Turn AUX L.O. Pump to AUTO, after Oil Inlet Header Pressure reaches 60 PSI.

22. Turn Rocker L.O. pump to AUTO.

23. Raise Engine speed to 514 RPM. Unit is ready to go on line (AFTER PRESSURE CIRCUIT ARMED LIGHT IS LIT).

SHUTTING #20 AND #21 ENGINES DOWN

1. Turn AUX L.O. pump to hand run.
2. Turn rocker L.O. pump to hand run.
3. Push Stop Button on Engine Control Panel.

After Engine comes to a complete stop:

"Run all oil pumps, jacket water pumps, for 10 minutes after shutdown to remove latent engine heat."

4. Turn off J.W. Pump.
5. Turn off I.C.W. Pump.
6. Turn off F.O. Supply Pump.
7. Turn off C. CASE Vacuum Pump.
8. Turn off AUX L.O. Pump.
9. Turn off Fan #1 J.W. Radiator.
10. Turn off Fan #1 I.C.W. Radiator.
11. Turn off F.O. Transfer Pump.
12. Turn off Fan #2 J.W. Radiator.
13. Turn off Fan #2 I.C.W. Radiator.
14. Close Main Fuel Valve to Day Tanks.

Attachment D

ADDITIONAL APPLICABLE REQUIREMENTS

Additional applicable requirements for units 2, 3, and 8 through 21 (002, 003, 008-021) and the associated compliance methods, recordkeeping, and monitoring requirements are set forth in the current operating permit, attached.

METROPOLITAN DADE COUNTY, FLORIDA

METRODADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
33 S.W. 2nd AVENUE
MIAMI, FLORIDA 33130-1540
(305) 372-6789

AIR EMISSIONS
ANNUAL OPERATING PERMIT

PERMITTEE:
Mr. James L. Swarts
GORDON W. IVEY MUN. POWER PLANT
675 N FLAGLER AVE
HOMESTEAD, FL 33030

PERMIT No.: AP-00145 (A3)/MSP-00541-93 08
SOURCE NAME: GORDON W. IVEY MUN. POWER PLANT
LOCATION: 675 N FLAGLER AVE
HOMESTEAD, FL 33030

DESCRIPTION OF FACILITY/EQUIPMENT:

POWER GENERATING FACILITY

Eighteen internal combustion engines for generating electric power using both, natural gas and #2 fuel oil.

SPECIFIC CONDITIONS:

01 No visible emissions equal to or greater than 20% opacity permitted from this facility.

02 No objectionable odor is allowed.

GENERAL CONDITIONS:

03 The applicant, by acceptance of this document, agrees to operate and maintain the subject operation so as to comply with the requirements and standards of Chapter 24 of the Code of Metropolitan Dade County.

04 If for any reason, the applicant does not comply with or will be unable to comply with any condition or limitation specified on this document the applicant shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps taken to reduce, eliminate, and prevent recurrance of the non-compliance. The applicant shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this document.

05 As provided in Section 24-30 of the Code of Metropolitan Dade County, the prior written approval of the Department of Environmental Resources Management shall be obtained for any alteration to this facility.

06 The issuance of this document does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. Nor does it relieve the applicant from liability for harm or injury to human health or welfare or property.

07 This document is required to be posted in a conspicuous location at the pollution control facility site during the entire period of operation.

08 This document is not transferable. Upon sale or legal transfer of the property or facility covered by this document, the applicant shall notify the department within thirty(30) days. The new owner must apply for a permit within thirty (30) days. The applicant shall be liable for any non-compliance of the source until the transferree applies for and receives a transfer of this document.

09 The applicant, by acceptance of this document, specifically agrees to allow access to the named source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this document and department rules.

10 This document does not indicate a waiver of or approval of any other department permit that may be required for other aspects of this facility.

Section Approval: Ed Anderson

11 This document does not constitute an approval by DERM or certification that the applicant is in compliance with applicable laws, ordinances, rules or regulations. The applicant acknowledges that separate enforcement actions may be initiated by DERM and that this document does not constitute compliance with orders issued in conjunction with enforcement actions for correction of violations.

12 Failure to comply with any condition of this document, or the standards as set forth in Chapter 24, Code of Metropolitan Dade County may subject the applicant to the penalty provisions of said Chapter including civil penalties up to $25,000 per day per offense and/or criminal penalties of $500 per day and/or sixty (60) days in jail.

Application Contact

1. Name and Title of Application Contact :

Name : James L. Swartz
Title : Director of Utilities

2. Application Contact Mailing Address :

Organization/Firm : Gordon W Ivey Municipal Power Plant
Street Address : 675 N. Flagler Ave.
City : Homestead
State : FL Zip Code : 33030-____

3. Application Contact Telephone Numbers :

Telephone : (305)247-1801 Fax : (305)247-4008

Application Comment

This application contains certain information and data on unregulated units which was included prior to the FDEP's permit simplification changes, but is no longer required. Due to the cumbersome nature of the electronic software (ELSA) and time constraints, this information was not deleted. The information is not displayed in the ELSA software, but is displayed when the application forms are printed out. Such information has not been updated or verified, may be inaccurate, and should not be reviewed or relied upon in any way.

Additionally, note that this application is submitted using ELSA version 1.3a because it was finalized prior to the FDEP's decision not to release this version. Section III G, Emissions Unit Pollutants, does not print out correctly and information for pollutants from one specific unit may be printed out in the table for another unit. Further, there may be other print out problems caused by ELSA software "bugs".

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Name, Location, and Type

1. Facility Owner or Operator : Homestead City Utilities

2. Facility Name : G. W. Ivey Power Plant

3. Facility Identification Number : 0250013

4. Facility Location Information :

Homestead City Utilities
G.W. Ivey Power Plant
660 NE 1 Road
Homestead, Florida 33030
Dade County
Airs ID:0250013

Facility Address : 675 N. Flagger Ave.
City : Homestead
County : Dade Zip Code : 33030-____

5. Facility UTM Coordinates :

Zone : 17 East (km) : 553.80 North (km) : 2,817.30

6. Facility Latitude/Longitude :

Latitude (DD/MM/SS) : 25 28 24 Longitude (DD/MM/SS) : 80 27 53

7. Governmental Facility Code :	8. Facility Status Code :	9. Relocatable Facility?	10. Facility Major Group SIC Code :
4	A	N	49

11. Applicant Comment :

Facility SIC Codes

Facility SIC Codes :

Application Worksheet

Owner :	James L. Swartz		
City :	Homestead		
County :	Dade		
Status :	A	Major Group SIC :	49
AOR Required?		Ozone SIP Facility?	
Title V?	Y		
NSPS?	N		
NESHAP?	N		

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

Homestead City Utilities
G.W. Ivey Power Plant
660 NE 1 Road
Homestead, Florida 33030
Dade County
Airs ID:0250013

Owner/Authorized Representative or Responsible Official

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

Name : James L. Swartz
Title : Director of Utilities

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

Organization/Firm : City of Homestead
Street Address : 675 N. Flagler Ave.
City : Homestead
State : FL Zip Code : 33030-____

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

Telephone : (305)247-1801 Fax : (305)247-4008

4. Owner/Authorized Representative or Responsible Official Statement :

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

Signature Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit
002	2070 kW Diesel Generator #2
003	2070 kW Diesel Generator #3
008	2500 kW Diesel Generator #8
009	2500 kW Diesel Generator #9
010	2500 kW Diesel Generator #10
011	3270 kW Diesel Generator #11
012	3270 kW Diesel Generator #12

Scope of Application

Emissions Unit ID	Description of Emissions Unit
013	2070 kW Diesel Generator #13
014	2070 kW Diesel Generator #14
015	2070 kW Diesel Generator #15
016	2070 kW Diesel Generator #16
017	2070 kW Diesel Generator #17
018	8800 kW Diesel Generator #18
019	8800 kW Diesel Generator #19

Scope of Application

Emissions Unit ID	Description of Emissions Unit
020	6485 kW Diesel Generator #20
021	6485 kW Diesel Generator #21
No Id	(2) Cooling Towers for Unit Nos. 18 and 19

Purpose of Application and Category

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

This Application for Air Permit is submitted to obtain :

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

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

Current construction permit number :

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

Operation permit to be renewed :

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

Current construction permit number :

Operation permit to be revised :

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

Operation permit to be revised/corrected :

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

Operation permit to be revised :

Reason for revision :

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

This Application for Air Permit is submitted to obtain :

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

Current operation/construction permit number(s) :

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

Operation permit to be renewed :

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

Operation permit to be revised :

Reason for revision :

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

This Application for Air Permit is submitted to obtain :

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

Current operation permit number(s), if any :

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

Current operation permit number(s) :

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

Application Processing Fee

Attached - Amount : NA

Construction/Modification Information

1. Description of Proposed Project or Alterations :
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Application Processing Fee

Attached - Amount : NA

Construction/Modification Information

1. Description of Proposed Project or Alterations :
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Ivan L. Clark

   Registration Number : 0049777

2. Professional Engineer Mailing Address :

   Organization/Firm : R W Beck Inc.
   Street Address : 1125 17th Street, Suite 1900
   City : Denver
   State : CO Zip Code : 80202-2615

3. Professional Engineer Telephone Numbers :

   Telephone : (303)299-5247 Fax : (303)297-2811

4. Professional Engineer Statement :

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

Signature Date

* Attach any exception to certification statement.