

File
Florida Department of
Environmental Protection

Memorandum

TO: Bill Thomas, SWD
FROM: Joe Kahn *JK*
DATE: June 18, 1997
SUBJECT: Completeness Review of an Application Package for a Title V Operation Permit
Orange Cogeneration, L.P.: 1050231-001-AV

The Title V operating permit application package for the referenced facility is being processed in Tallahassee. The application was previously forwarded to your office for your files and future reference. Please have someone review the package for completeness and respond in writing by July 11, 1997, if you have any comments. Otherwise, no response is required. If there are any questions, please call me, at 904/488-1344 or SC:278-1344. It is very important to verify the compliance statement regarding the facility. Since we do not have a readily effective means of determining compliance at the time the application was submitted, please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. Also, do not write on the documents.

If there are any questions regarding this request, please call me or Scott Sheplak at the above number(s).

JK/bjb

cc: Jerry Kissel

6/18/97 *Joe Kahn*
Reading File



June 6, 1997

Mr. Scott M. Sheplak, P.E.
Administrator, Title V Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Additional Information
Facility ID No.: 1050231, Orange Cogeneration Facility

Dear Mr. Sheplak:

This correspondence provides some additional information and changes to the Title V air operating permit application. The following changes update the application originally submitted.

1. Facility Contact - The facility contact is now Mr. Dennis J. Oehring, Plant Manager. The revised information was included in revised pages of the Title V form under II Facility Information, Section A, Facility Contact.
2. Facility Fugitive Emissions - The Facility does not use hydrazine or hydrochloric acid. Attachment OR-FE-5 included in the facility information has been revised.
3. Emission Unit 4 Facility-wide Fugitive Emissions - Attachment OR-E04-B6 has been revised to indicate that "non-halogenated" solvents are used under the General Plant Site. The previous list included halogenated solvents, which are not used at the facility. In addition, a discussion of Trivial Activities and Notice of Temporary Exemptions has been added.

If you have any questions, please call me at (941) 682-6338.

Sincerely,

Allan Wade Smith
General Manager

cc: W. Thomas, FDEP-SWD
K. Kosky, Golder Associates
D. Oehring, CSW Energy

6/17/97 Joe Kohn

RECEIVED

JUN 16 1997

BUREAU OF
AIR REGULATION

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, 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 pollution 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 [X] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [Y] if so), I further 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.

Donald F. Gutz

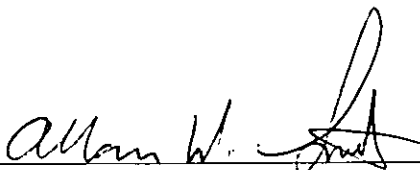
Signature
(seal)

29 April 1997

Date

* Attach any exception to certification statement.

Owner/Authorized Representative or Responsible Official

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|---|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official: Allan Wade Smith, General Manager |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Orange Cogeneration, G.P., Inc. Street Address: 1125 US 98 South, Suite 100 City: Lakeland State: FL Zip Code: 33801 |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 682-6338 Fax: (941) 683-8257 |
| 4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>6/6/97</u> |

* Attach letter of authorization if not currently on file.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

| | | | |
|--|--------------------------------------|--|------------------------------------|
| 1. Facility UTM Coordinates: Zone: 17 East (km): 418.7 North (km): 3083.0 | | | |
| 2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 27 / 52 / 15 Longitude: (DD/MM/SS): 81 / 49 / 31 | | | |
| 3. Governmental Facility Code: 0 | 4. Facility Status Code: A | 5. Facility Major Group SIC Code: 49 | 6. Facility SIC(s): 4911 |
| 7. Facility Comment (limit to 500 characters): The Orange Cogeneration Facility consists of two combustion turbines (CT) that exhaust through Heat Recovery Steam Generator (HRSG) stacks. The CTs are natural gas and biogas fired. There is an auxiliary boiler with a separate stack. | | | |

Facility Contact

| |
|---|
| 1. Name and Title of Facility Contact: Dennis J. Oehring, Plant Manager |
| 2. Facility Contact Mailing Address: Organization/Firm: PO Box 782 Street Address: 1901 Clear Springs Road City: Bartow State: FL Zip Code: 33830 |
| 3. Facility Contact Telephone Numbers: Telephone: (941) 534-1141 Fax: (941) 533-4152 |

ATTACHMENT OR-FE-5
FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities" (as presented in EPA's memorandum, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995). As a result, these activities are not included as part of this permit application. For example, emissions from general plant maintenance and upkeep activities at the facility would be considered fugitive emissions, but have been judged to be trivial since these activities are not conducted as part of a manufacturing process, not related to the source's primary business activity, and do not otherwise trigger a permit modification.

Fugitive emissions that may result from the operation or activities that are not trivial at the facility are addressed in Emission Unit No. 4. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

Orange Cogeneration has not identified fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation.

Fugitive HAPs Emissions

The following hazardous air pollutants are present on the facility property and are potential sources of fugitive HAPs emissions:

- chlorine
- methyl ethyl ketone
- toluene
- xylene

Chlorine - Present in three 1-ton containers. Used for water treatment at the facility.

Methyl Ethyl Ketone, Toluene, Xylene - The facility maintains several containers of paint thinner and solvents (which may contain MEK, toluene, or xylene) for use in plant maintenance activities. These containers are kept closed and are stored in weather-tight buildings. These emissions as a whole are addressed in the VOC section (preceding page).

Regulated Toxic or Flammable Substances

The following regulated toxic or flammable substances are present at the Orange Cogeneration facility:

- chlorine
- acetylene
- methane (natural gas)

Acetylene - Present on the facility property in 100-lb cylinders which are used for plant maintenance (welding and cutting).

Methane - Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating units. This fuel delivery system is normally airtight, but does have safety valves which may open if an overpressure condition develops in the gas line.

ATTACHMENT OR-E04-B6
EMISSIONS UNIT COMMENT

TRIVIAL ACTIVITIES

The trivial activities identified in this application are provided for information only and are identified as examples of, but not limited to, the trivial activities identified by the Division of Air Resources Management's (DARM's) guidance. It is understood that such activities do not have to be included in with the Title V Application. The trivial activities identified herein are consistent, in terms of amounts of emissions and types, with those activities listed in DARM's guidance.

NOTIFICATION OF TEMPORARY EXEMPTIONS

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provide that the emissions units listed below are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800 F.A.C.

Attachment OR-E04-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Unregulated Emission Unit, Orange Cogeneration Limited Partnership, Orange Cogeneration Facility

| Area | Activity/ Operation Description | Status |
|---------------------------------------|--|--------|
| <u>Plant Service Building</u> | | |
| Plant Maint. Shop Area | Indoor Fugitives (grinder, drill presses, etc.) | TR |
| | Sand Blasting/ Grit Blasting | ER/TR |
| | Flamible Storage Locker (chemicals, solvents, and oils) | TR |
| Soda Ash Room | Soda Ash (dry powder injection) | TR |
| Cooling Towers | Primary Water Cooling Tower | UR |
| | Secondary Water Cooling Tower | UR |
| | Waste Water Cooling Tower | UR |
| <u>Water Treatment</u> | | |
| | Sulfuric Acid Tank (6,000 gal) | TR |
| | Calandria Anti-Foam Tank (400 gal) | TR |
| | Caustic Soda Tank (6,000 gal) | TR |
| | Chlorine Storage (3 - 1 ton cylinders) | TR |
| | Raw Water Chlorine Tank | TR |
| | <u>Cooling Tower Chemicals</u> | TR |
| | Dispersant Tank (400 gal) | |
| | Corrosion Inhib. Tank (400 gal) | |
| | Sodium Bromide Tank (400 gal) | |
| | <u>Chemical Storage Area</u> | TR |
| | RO Antiscalant- 50 gal | |
| | Clarifier Coagulant - 400 gal | |
| | Clarifier Flocculant - 100 gal | |
| | Chlorine Oxygen Scavenger - 75 gal | |
| <u>Gas Compressor Building</u> | | |
| | New Lube Oil Storage (drums) | UR |

Attachment OR-E04-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Unregulated Emission Unit, Orange Cogeneration Limited Partnership, Orange Cogeneration Facility

| Area | Activity/ Operation Description | Status |
|---|---|--------|
| <u>Outside Gas Compressor Building</u> | | |
| | Waste Oil Storage (1 - 200 gal tank) | UR |
| <u>Fire Pumphouse</u> | | |
| | 165 Hp Detroit Diesel Engine | ER/TR |
| | Diesel fuel tank (250 gal or less) | UR |
| <u>CT/HRSG & Steam Turbine</u> | | |
| | CTs Lube Oil Vapor Extractor (Mist Elimination System) | UR |
| | Lube Oil Air/Oil Separator | UR |
| | STG Drain Flash Tank | UR |
| | Various Pumps (sumps, condensate, etc.) | TR |
| | Miscellaneous Drains Tank | TR |
| | CT Lube Oil Drain Tank (2 - 50 gal) | TR |
| | STG Lube Oil Tank Storage Tank (500 gal) | UR |
| | CT Lube Oil Tank Storage Tank (2 - 150 gal) | UR |
| | Condenser Pumps (3) | TR |
| | Condenser Vents (3) | TR |
| | Gland Seal Exhauster | TR |
| | <u>HRSG Boiler Chemical Injection</u> | TR |
| | Amine Tank (400 gal) | |
| | Phosphate Tank (400 gal) | |
| | Oxygen Scavenger (400 gal) | |
| <u>Auxillary Boiler</u> | | |
| | <u>Boiler Chemical Injection</u> | TR |
| | Amine Tank (75 gal) | |
| | Phosphate Tank (75 gal) | |
| | Oxygen Scavenger (75 gal) | |

Attachment OR-E04-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Unregulated Emission Unit, Orange Cogeneration Limited Partnership, Orange Cogeneration Facility

| Area | Activity/ Operation Description | Status |
|----------------------------------|--|--------|
| <u>General Plant Site</u> | Non-Halogenated Solvent Cleaners/Degreasers | TR |
| | Sewage Waste System | UR |
| | Substation Transformers and Associated Equipment (4 transformers) | TR |

Note: ER= Exempt by Rule 62-210.300(3)(a); TR= Trivial; UR= Unregulated.