VIN TOWERS OFFICE BUILDING
00 BLAIR STONE ROAD
ALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

# DEPARTMENT OF ENVIRONMENTAL REGULATION

February 25, 1981

Mr. Kent Williams, Chief
New Source Review Section
Air Facilities Branch
U.S. Environmental Protection
Agency, Region IV
345 Courtland Street
Atlanta, Georgia 30365

RE: PSD Permit Application -
Sebring Utilities (PSD-Fl-071)

Dear Kent:

Enclosed for your review and comment are the Public Notice and Preliminary PSD Determination for the Sebring Utilities Commission's proposed slow-speed diesel generating units to be located near Sebring, Florida. The Public Notice will appear in a local newspaper, Sebring News, on February 25, 1981.

Please let my office know if you have comments or questions regarding this determination. You may direct your comments to Ms. Teresa Heron, Review Engineer or Mr. Tom Rogers, Meteorologist, both at (904) 488-1344.

Sincerely,

Larry George

for Steve Smallwood, P.E., Chief
Bureau of Air Quality Management

SS:dav

Enclosure

Preliminary Determination
Sebring Utilities Commission
PSD-FL-071

I. Applicant

Sebring Utilities Commission

Post Office Box 971

Sebring, Florida 33970

II. Source Location

The proposed source is located east of State Road 623, near the town of Sebring, in Highlands County, Florida. The UTM coordinates are: Zone 17, 464.3 km East and 3035.4 km North.

III. Project Description

The applicant proposes to install and operate two 19.5 MW output capacity, slow-speed, two-cycle diesel generating units equipped with a heat recovery system for auxiliary electric power production. The heat recovery system is expected to generate an additional 3.34 MW of electricity. The proposed diesel engine generators will be used as base load units supplying a majority of the Sebring Utilities Commission generating capacity. The engines will be operated at full load utilizing residual (No. 6) fuel oil having a maximum sulfur content of 2.5%. The maximum fuel oil consumption for each 19.5 MW unit will be 9,199.5 pounds per hour. This is equivalent to a heat input of 172 million Btu per hour (HHV of oil).

The proposed engines will operate in the range of 90-150 revolutions per minute. Units of this type, while popular in Europe, have not been widely used in America.

This will be the first such installation in Florida.

Construction of the new units is scheduled to begin in April 1981 with completion by June 1983. The units will be operated at an annual capacity factor of 80 percent.

IV. Source Impact Analysis

The proposed diesel engines have the potential to emit greater than 250 tons per year of sulfur dioxide, nitrogen oxides, carbon monoxide and hydrocarbons, all criteria pollutants regulated under the Clean Air Act as amended on August 7, 1977. Thus, in accordance with Title 40, Code of Federal Regulations, Part 52.21 (40 CFR 52.21) as revised August 7, 1980 (45 FR 52676), the proposed construction is a major stationary source and is subject to review under federal Prevention of Significant Deterioration (PSD) regulations.

PSD review is required for each pollutant for which a significant emissions increase will occur. Tables I and II summarize the potential to emit of all pollutants regulated under the Act which are associated with the proposed construction. As these tables show, the proposed emissions increases of particulate matter (PM), sulfur dioxide ($SO_2$), nitrogen oxides ($NO_x$), carbon monoxide (CO) and hydrocarbons (HC) exceed the significance levels set in the PSD regulations. The emissions increases of the non-criteria pollutants

and lead will not be significant and therefore these pollutants are not subject to PSD review.

The PSD review consists of an analysis of the following:

A. Best Available Control Technology (BACT);

B. National Ambient Air Quality Standard (NAAQS) Impacts;

C. PSD Increment Impacts;

D. Class I Area Impacts;

E. Growth Impacts; and

F. Soils, Visibility, and Vegetation Impacts.

Table I

Summary of Potential Emissions

Criteria Pollutants

(tons/year)*

| Emission Unit | $SO_2$ | $NO_x$ | PM | CO | HC |
|---|---|---|---|---|---|
| Diesel Engines (2)[a] | 3,864 | 4,804 | 142 | 832 | 378 |
| PSD Significance Level[b] | 40 | 40 | 25 | 100 | 40 |

*Based on 8,400 hours/year operating time.

(a) As estimated by the applicant (supplemental information, dated January 30, 1980).

(b) Extracted from 40 CFR 52.21(b)(23)(i), promulgated August 7, 1980.

Table II

Summary of Potential Emissions-

Noncriteria Pollutants and Lead

(tons/year)*

| Emission Unit | Lead | Beryllium | Mercury | Fluorides |
|---|---|---|---|---|
| Diesel Engines (2) [a] | 0.03 | $6 \times 10^{-6}$ | 0.03 | $8 \times 10^{-5}$ |
| PSD Significance Level [b] | 0.05 | 0.0004 | 0.1 | 3 |

*Based on 8,400 hours/year operating time.

(a) As estimated by the applicant (PSD application, dated December 19, 1980).

(b) Extracted from 40 CFR 52.21(b)(23)(i), promulgated August 7, 1980.

A. Best Available Control Technology Analysis (BACT)

The applicant is required, under the provisions of 40 CFR 52.21 as revised August 7, 1980 (45 FR 52676), to apply BACT to all criteria and noncriteria pollutants emitted in significant quantities. BACT is determined for each pollutant on a case-by-case review, taking into account energy, environmental and economic impacts.

The applicant has proposed BACT for each applicable pollutant and has presented justification for the standards selected. EPA has reviewed and accepted the technology and emission limits proposed as BACT. The federal PSD permit shall be conditioned to include these limits or any more stringent emission standards that are imposed by the State of Florida under its SIP for these proposed sources. These limits are summarized in Table III. A discussion of the BACT for each pollutant follows.

1. Nitrogen Oxide Control

The primary pollutant emitted by a stationary internal combustion (IC) engine is nitrogen oxides ($NO_x$). IC engines account for over 6 percent (or 16 percent of the stationary source component) of the total U.S. inventory of $NO_x$ emissions.

The proposed New Source Performance Standard (NSPS) published July 23, 1979, for Stationary Internal Combustion Engines is 600 ppm corrected for shaft efficiency and to 15 percent oxygen on a dry basis. This standard was selected

as the best technological system of emission reduction of $NO_x$ from stationary IC engines. The technological systems evaluated are discussed at length in the preamble to the proposed standard.

Four emission control techniques or combinations of these techniques have been identified as demonstrated $NO_x$ emission reduction systems for stationary large-bore IC engines. These techniques are:

(1). Retarded ignition or fuel injection.

(2). Air-to-fuel ratio changes.

(3). Manifold air cooling.

(4). Derating power output.

Fuel injection retard is the most effective $NO_x$ control technique for diesel engines.

Due to inherent differences in the uncontrolled $NO_x$ emission characteristics among various engines, the selection of the best system of emission reduction was analyzed in terms of the degree of reduction in $NO_x$ emissions as a function of the degree of application of each emission control technique. Based on this criteria, the proposed NSPS for internal combustion engines showed that a 40 percent reduction for $NO_x$ emissions would be achievable.

The applicant proposes to alter the compression ratio and to retard the fuel injection as BACT for the control of

$NO_x$ emissions. This will result in a reduction of $NO_x$ emissions of approximately 37 percent from that of an uncontrolled engine. This level of control is consistent with the proposed NSPS.

The applicant proposes a BACT emission level of 650 ppm with corrections for engine shaft and bottoming cycle efficiency and oxygen content in the stack gas. An emissions increase of 50 ppm $NO_x$ above the proposed NSPS base level (600 ppm) is proposed because of the nitrogen content in the residual oil.

There is a NSPS (subpart GG) for Gas Turbines. This NSPS allows, as an upper limit, a 50 ppm $NO_x$ emissions increase for the fuel-bound nitrogen content of residual oil. The proposed diesel engines will use No. 6 oil, a high-viscosity residual oil. The effect of the conversion of fuel-bound nitrogen in heavy fuel to $NO_x$ was recognized in the NSPS (subpart GG) for Gas Turbines.

The proposed NSPS (subpart FF) for Stationary Internal Combustion Engines limits $NO_x$ emissions to 600 ppm corrected to 15% oxygen on a dry basis. The fuel considered is No. 2 diesel oil from which the potential contribution of fuel-bound nitrogen to $NO_x$ emissions is likely to be small. No allowance has been included for the fuel-bound nitrogen content of the fuel in determining compliance with the proposed NSPS for a diesel engine.

Highly efficient engines generally operate at higher temperature and pressure and as a result discharge gases with higher $NO_x$ concentrations than less efficient engines, although the brake-specific mass emissions from both engines could be the same. Since the fuel consumption of IC engines varies linearly with efficiency, an efficiency adjustment factor is included in the proposed NSPS to permit increased $NO_x$ emissions for the lower fuel consumption IC engines.

An IC engine with waste heat recovery will have a higher overall efficiency than an IC engine alone. The application of the efficiency adjustment factor to the entire system would permit greater $NO_x$ emissions. The efficiency adjustment factor in the proposed NSPS applies only to the IC engine itself and not the entire system of which the engine may be a part.

The applicant proposes to capture waste heat from the diesel engine exhaust gases and use it for supplementary electric generation. Utilization of this waste heat will allow a considerable saving in the amount of oil required to generate a given amount of power. The waste heat boiler steam will eliminate the requirement for an auxiliary boiler to heat the No. 6 oil. As pollutant emissions are directly proportional to fuel use, this system will reduce by approximately 7 percent the emissions of $SO_2$, $NO_x$, PM, CO and HC. If this system were not installed, generation of additional power

from the proposed facility (or another facility) would be required, resulting in increased pollutant emissions. The applicant proposes that the benefit of this increased efficiency be included in the determination of the allowable $NO_x$ emission standard.

Based on the above comparisons and the BACT analysis presented by the applicant, EPA determines that the proposed $NO_x$ emission limit of 819 ppm corrected to 15% oxygen on a dry basis is reasonable as BACT.

2. Carbon Monoxide and Hydrocarbons Control

The applicant proposes emissions levels for carbon monoxide (CO) and hydrocarbons (HC) based on emission estimates from Sulzer Brother Limited who will manufacture the diesel engines. These emission levels are consistent with those found in AP-42.

CO and HC emissions are a function of combustion efficiency. However, combustion conditions which minimize $NO_x$ emissions increase uncontrolled CO and HC emissions from stationary IC engines. $NO_x$ emission control techniques are essentially design modifications, not add-on equipment. Therefore, $NO_x$ emission reductions are much harder to achieve than CO or HC emission reductions and there exists a trade-off between $NO_x$ emission reduction and CO and HC emissions increases.

Based on these facts, EPA agrees that the proposed emission limits of 0.575 lb/million Btu for CO and 0.26

lb/million Btu for HC constitute BACT for the proposed source.

3. Particulate Matter Control

The BACT limitation proposed for particulate matter (PM), 0.1 lb/million Btu, is based upon particulate tests performed on the Freeport, New York diesel generating plant. The engines at this plant are similar to the ones proposed by the applicant.

Particulate emissions from stationary IC engines are virtually invisible when the engine is operating at a steady state, although excessive retard will cause the diesel unit to emit smoke. The $NO_x$ emission control systems used in the development of the proposed NSPS for IC engines were considered only if the plume did not exceed ten percent opacity. Therefore, EPA feels that the $NO_x$ control techniques used to meet the proposed standards for large stationary IC engines will not cause excessive visible or particulate emissions.

EPA concurs that the applicant's proposed 0.1 lb/million Btu emission limit for PM is reasonable as BACT.

4. Sulfur Dioxide Control

The applicant proposes an emission limit of 2.67 lb/million Btu (equivalent to 2.5% sulfur content in the oil) as BACT. The basis for the BACT emission limit is analysis of available control technology, environmental impacts, energy impacts and economic impacts.

Sulfur dioxide ($SO_2$) emissions from an IC engine depend on the sulfur content of the fuel and the fuel consumption of the engine. Scrubbing of IC engine exhausts to control $SO_2$ emissions does not appear to be reasonable from an economic viewpoint. Therefore, the only viable means of controlling $SO_2$ emissions is the combustion of low sulfur fuels.

The supply of low sulfur fuel oil on a long term basis is questionable. Recent actions by the OPEC countries to limit the export of lighter, lower sulfur crude oil will reduce the availability of these fuels. The use of low sulfur oil, if it were available, would increase the cost of electrical power to the average residential customer of the City of Sebring by 16.4 percent.

Since no NSPS for sulfur dioxide emissions from an internal combustion engine have been proposed, EPA feels that the $SO_2$ emission limit should be as stringent as that allowed for existing utilities using the same fuel. Therefore, EPA concurs that the proposed maximum of 2.5% sulfur in the fuel oil constitutes BACT for $SO_2$ emissions for these diesel engines. This limit is consistent with a previous BACT determination made by the State of Florida for the same type engines.

Table III

BACT for Each Slow-Speed Diesel Engine

| Pollutant | Proposed NSPS Limit | Applicant Proposed Limit | State Permit Limit | PSD BACT Limit |
|---|---|---|---|---|
| $NO_2$ | 600 ppm corrected for engine efficiency and to 15% oxygen on a dry basis. | 650 ppm corrected for efficiency (shaft plus heat recovery) and oxygen | 819 ppm[(a)] corrected to 15% oxygen on a dry basis | 819 ppm corrected[(a)] to 15% oxygen on a dry basis |
| CO | -- | 0.575 lb/MMBTU | 0.575 lb/MMBTU | 0.575 lb/MMBTU |
| HC | -- | 0.26 lb/MMBTU | 0.26 lb/MMBTU | 0.26 lb/MMBTU |
| PM | -- | 0.1 lb/MMBTU | 0.1 lb/MMBTU | 0.1 lb/MMBTU |
| $SO_2$ | -- | 2.67 lb/MMBTU or 2.5% S in fuel oil | 2.67 lb/MMBTU or 2.5% S in fuel oil | 2.67 lb/MMBTU or 2.5% S in fuel oil |

(a) Based on diesel engine operating at 100% capacity (162 MMBTU/hr heat input, 19,535 MW shaft output). At less than 100% capacity, allowable $NO_x$ emissions shall be determined by the following formula:

$$STD = (650)\left(\frac{10.2}{Y}\right)$$

where:

STD = Allowable $NO_x$ emission (parts-per-million volume corrected to 15 percent oxygen on a dry basis).

Y = Manufacturer's rated brake-specific fuel consumption at peak load (kilojoules per watt-hour) or owner/operator's brake-specific fuel consumption at peak load as determined in the field.

B. National Ambient Air Quality Standards (NAAQS) Analysis

An air quality analysis was performed to demonstrate that emissions from the proposed new source (consisting of the two diesel engines) in addition to existing ambient concentrations, will not cause or contribute to ambient concentrations in excess of any NAAQS. The analysis considered emissions of $SO_2$, TSP, $NO_x$, CO, and HC.

The analysis was performed using EPA-approved air quality dispersion models with five years of meteorological data. Orlando surface and Tampa upper air data were used in the modeling, with the Orlando surface data set chosen over Tampa's because of its better representation of an inland site. Annual average concentrations were estimated with AQDM-Briggs. Short-term concentrations (24-hours and less) were estimated by first running the CRSTER model for five years to identify periods and areas of maximum impact. Further more refined modeling using PTMTPW with a finer receptor grid spacing (0.1 km) gave the final maximum short-term concentrations.

Background concentrations were obtained from two air quality monitoring stations in Highlands County operated by the Florida Department of Environmental Regulation. The pollutants monitored were PM (two sites) and $SO_2$ (one site). The monitoring sites were established as being representative of the proposed location.

The $SO_2$ monitor, located near Sebring, had a ~~maximum~~ highest, second-highest 24-hour observation over the five year record at the site of ~~55.0~~ 50.0 ug/$m^3$. This occured in 1979, the last year of the record. The maximum annual average, 10.9 ug/$m^3$, also occured for the year 1979. These values were used for the respective 24-hour and annual background levels. Information on the 3-hour background was not available from this monitor, ~~so the 24-hour average was also used for the 3-hour average.~~ → Insert B

The annual average background level for PM was based on the highest annual average of the last three years at the Sebring site, ~~31.0~~ 32.0 ug/$m^3$. ~~The three year average was used because the last year of record (1979) was not the highest of the five years of data.~~

The 24-hour PM background level was ~~determined statistically via the method of Larsen.~~ based on the highest, second-highest 24-hour concentration at the Sebring site. ~~The premise of the statistics was to determine the background level for which the probability of occurence, in conjunction with worst-case point source model predictions, is less than one day in five years.~~ The 24-hour PM background level obtained was ~~43~~ 75 ug/$m^3$.

The background levels for CO and $NO_x$ were not addressed because the maximum impact of the proposed source is less than the significance levels for monitoring evaluation given in 40 CFR 52.21(c), as revised. Also, the Sebring area in Highlands county is a rural area over 100 kilometers from

Tampa, the nearest urban center. Since high levels of pollution derived CO, $NO_x$, and ozone are associated with heavily urbanized areas, background values of these pollutants will be low.

Table IV summarizes the results of the NAAQS analysis. It shows that emissions from the proposed new source will not cause or contribute to ambient concentrations in excess of any NAAQS.

Table IV

NAAQS Analysis Results

| Pollutant | Averaging Period | Monitoring Significance Value ($ug/m^3$) | Maximum Impact Proposed Source ($ug/m^3$) | Background Air Quality ($ug/m^3$) | Total Projected Air Quality ($ug/m^3$) | NAAQS ($ug/m^3$) |
|---|---|---|---|---|---|---|
| $SO_2$ | Annual | - | 2.6 | 11. | 13.6 | 80. |
| | 24-hour | 13. | 28.[1] | 50. 55. | 78. 83. | 365. |
| | 3-hour | - | 114.[1] | 250. 55. | 364. 171. | 1300. |
| PM | Annual | - | 1 | 32. 31. | 33. 32. | 75. |
| | 24-hour | 10. | 1[1] | 75. 43. | 76. 44. | 260. |
| CO | 8-hour | 575. | 13. | - | <<10,000. | 10,000. |
| | 1-hour | - | 37. | - | <<40,000. | 40,000. |
| $NO_x$[2] | Annual | 14. | 2.5 | - | << 100. | 100. |

1. Highest second-high concentration for five-year period.

2. Assuming all $NO_x$ is converted to $NO_2$.

C. PSD Increment Analysis

Maximum allowable increases in ambient air pollutant concentrations (increments) are set by the PSD regulations for $SO_2$ and PM. The proposed new source is subject to both $SO_2$ and PM increment analysis for Class II areas. In assessing the impact of the new source for increment consumption, all other sources which consume increment and which significantly interact with the proposed new source must be included. In the area surrounding the proposed site, no other increment consuming sources were identified which would interact significantly with the new source. Thus, the analysis was accomplished by modeling the new source alone and no determination of baseline concentrations was necessary.

The stack height of the source ~~which was~~ used in the modeling (150 ft.) does not exceed the Good Engineering Practice (GEP) stack height. The GEP stack height ~~was~~ calculations are: ~~calculated to be 195 feet.~~ The proposed source is in the proximity of a Federal Aviation Administration (FAA) regulated airport and is limited by FFA (FAA) regulations to a maximum stack height of 150 feet. The possibility of a downwash situation has been effectively avoided by increasing the stack exit velocity (to 35 m/s), thus allowing the plume to escape the entraining cavity of the nearby building.

See Insert A

The results of the modeling using CRSTER for short-term averages and AQDM for long-term averages are compiled

in Table V. The maximum increment consumption for both pollutants and all averaging periods is 31% for the 24-hour $SO_2$ impact of 28 ug/$m^3$. The maximum annual $SO_2$ increment impact is 2.6 ug/$m^3$ or 13% of the increment. The 3-hour impact is 114 ug/$m^3$ or 22% of the increment. For PM the maximum annual impact is less than 1 ug/$m^3$ or less than 5% of the increment. The 24-hour maximum increment consumption is 1 ug/$m^3$ or approximately 2% of the allowed increase.

It should be noted that, in accordance with EPA modeling guidelines, maximum value impacts are based on the highest, second-high concentrations for each year for averaging times of 24-hours of less when five years of meteorology are used. Also, the model was run for loads of 100,75, and 50 percent capacity with the 100 percent condition found to be the limiting condition.

It is clear from these results that no increment violation will occur due to operation of the proposed new source.

Table V

Increment Analysis Results

| Pollutant | Averaging Period | Distance from Source (km) | Maximum Impact ($ug/m^3$) | Class II Increment ($ug/m^3$) | Percent of Increment Consumed (%) |
|---|---|---|---|---|---|
| $SO_2$ | Annual | 2.0 | 2.6 | 20. | 13. |
| | 24-hour | 3.1 | 28.[1] | 91. | 31. |
| | 3-hour | 1.3 | 114.[1] | 512. | 22. |
| PM | Annual | 2.0 | 1. | 19. | 5. |
| | 24-hour | 3.1 | 1. | 37. | 2. |



1. Highest second-high concentration for five year period.

D. Class I Impacts

The Class I area nearest to the site is the Chassahowitzka Wilderness Area, located 169 kilometers to the northwest. This distance is beyond the distance at which impacts can be reasonably estimated and no impact analysis was performed. However, considering the maximum impacts predicted in the vicinity of the source and the dilution which will be experienced over a 169 kilometer distance, it is concluded that the proposed source will have no impact on any Class I area.

E. Growth Impacts

The proposed source is not expected to significantly impact the industrial, commercial, or residential growth in the area. The local work force currently in the Sebring area will for the most part be sufficient to operate the new source. Further, the new source consumes less than 31 percent of the allowable PSD increments in the area and thus will not substantially limit future industrial growth in the area. Therefore, the overall impact on growth is small and no adverse effects are anticipated.

F. Soils Vegetation, and Visibility

No significant adverse impacts on soils, vegetation, and visibility are expected from the proposed new source. All pollutants have maximum impacts below the secondary standards designed to protect the public welfare. Public welfare includes damage to crops, buildings, vegetation, etc. In addition, scientific studies designed to quantify the sensitivity of many plant species have shown threshold levels much higher than those predicted to occur in the vicinity of the proposed site. For example, alfalfa, which is commonly thought to be one of the most sensitive species to $SO_2$, has a 2-hour threshold of about 2,600 $ug/m^3$ and an 8-hour threshold of 655 $ug/m^3$, far above any of the predicted impact levels.

The proposed source is expected to cause no significant impairment of visibility, either in the immediate area or at greater distances, except for some small transient effects locally during the construction phase of the source. No long-term effects are expected. In general no significant impacts are expected due to the relatively low emission rates of the source pollutants.

## V. Conclusions

EPA Region IV proposes a preliminary determination of approval with conditions for the construction of the two 20 MW diesel engine generators with a waste heat recovery boiler proposed by Sebring Utilities Commission in its application (PSD-FL-071) submitted on January 9, 1981 (application determined complete as of February 2, 1981). This determination is based on the information contained in the application including supplementary information dated February 2, 1981. The conditions set forth in the permit are as follows:

1. The new source shall be constructed in accordance with the capacities and specifications stated in the application.

2. The allowable emissions limits for each slow-speed diesel engine shall be as follows:

| Pollutant | Maximum Emissions |
|---|---|
| Nitrogen Oxides ($NO_x$) | 819 ppm @ 15% $O_2$ and 572 lb/hr |
| Carbon Monoxide (CO) | 0.575 lb/MMBTU and 99 lb/hr |
| Hydrocarbons (HC) | 0.26 lb/MMBTU and 45 lb/hr |
| Particulate Matter (PM) | 0.10 lb/MMBTU and 17 lb/hr |
| Sulfur Dioxide ($SO_2$) | 2.67 lb/MMBTU and 460 lb/hr |

or any other more stringent emission standard imposed by the State of Florida.

3. Performance tests to demonstrate compliance with the allowable emission limits for nitrogen oxides shall be conducted using EPA reference method 20 modified as per proposed NSPS, subpart FF, Section 60.324. Compliance with the sulfur dioxide emission limits will be determined by reference method 6 or by calculations based on fuel analysis for sulfur content. Compliance with carbon monoxide emission limits will be determined by reference method 10. Compliance with hydrocarbon emission limts will be assumed provided the CO allowable emission rate is achieved; specific HC compliance testing is not required. Compliance with the PM emission rate will be assumed if the visible emissions, by reference method 9, are below 10% opacity.

4. The following operation parameters shall be monitored on a daily basis. Daily monitoring requirements shall be accurate to within five percent.

    (1). Intake manifold temperature

    (2). Intake manifold pressure

    (3). Engine speed

    (4). Diesel rack position (full flow)

    (5). Injector timing

    (6). Gross heat of combustion value and percent sulfur content by weight for each fresh supply of fuel added to the fuel storage facility.

The operating monitoring parameters shall be recorded daily for each engine. The operating ranges for each parameter over which the engine complies with the $NO_x$ emission limit shall be determined during the compliance test. Once established these parameters will be monitored to ensure proper operation and maintenance of the emission control techniques employed to meet the emission limit.

Records of the analysis and monitored engine parameters shall be recorded and kept for public inspection for a minimum of two years after the data are recorded.

5. The source shall comply with the provisions and requirements of the attached general conditions.

## GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.

2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.

3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.

4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.

5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:

   (a) description of noncomplying emission(s),

   (b) cause of noncompliance,

   (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,

   (d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

   and

   (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

   Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.

7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.

8. The permittee shall allow representatives of the State environmental control agency and/or representatives of the Environmental Protection Agency, upon the the presentation of credentials:

   (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;

   (b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;

   (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

   (d) to sample at reasonable times any emission of pollutants;

   and

   (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to the:

   Chief, Air Facilities Branch
   Air and Hazardous Materials Division
   U.S. Environmental Protection Agency
   Region IV
   345 Courtland Street
   Atlanta, Georgia 30308

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

VI. References

1. Code of Federal Regulations, 40 CFR, Appendix A.
2. Federal Register, Vol. 44, No. 142, July 23, 1979 - Proposed Standards of Performance for Stationary Internal Combustion Engines.
3. Federal Register, Vol. 44, No. 176, September 10, 1979 - Standards of Performance for Stationary Gas Turbines.
4. Federal Register, Vol. 45, No. 154, August 7, 1980 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans.

Public Notice

A new air pollution source is proposed for construction by the Sebring Utilities Commission near the town of Sebring, in Highlands County, Florida. The source consists of two slow-speed diesel elecrtic generating units. It will increase emissions of air pollutants by the following amounts in tons per year:

| PM | $SO_2$ | $NO_x$ | CO | HC | Other |
|---|---|---|---|---|---|
| 142 | 3,864 | 4,804 | 832 | 378 | Negl. |

By authority of the U.S. Environmental Protection Agency, the Florida Department of Environmental Regulation (FDER) has reviewed the proposed construction under Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21). The FDER has made a preliminary determination that the construction can be approved provided certain conditions are met. A summary of the basis for this determination and the application for a permit submitted by the Sebring Utilities Commission are available for public review in the following FDER offices:

South Florida District
2269 Bay Street
Fort Myers, Florida

Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

The maximum percentage of allowable increment consumed by the proposed construction is as follows:

| | Class II | | |
|---|---|---|---|
| | Annual | 24-Hour | 3-Hour |
| PM | 5% | 2% | N/A |
| $SO_2$ | 13% | 31% | 22% |

Any person may submit written comments to FDER regarding the proposed construction. All comments postmarked not later than 30 days from the date of this notice will be considered by FDER in making a final determination regarding approval for construction of this source. These comments will be made available for public review at the above locations. Furthermore, a public hearing can be requested by any person. Such requests should be submitted within 15 days of the date of this notice. Letters should be addressed to:

Ms. Teresa Heron, Review Engineer
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301