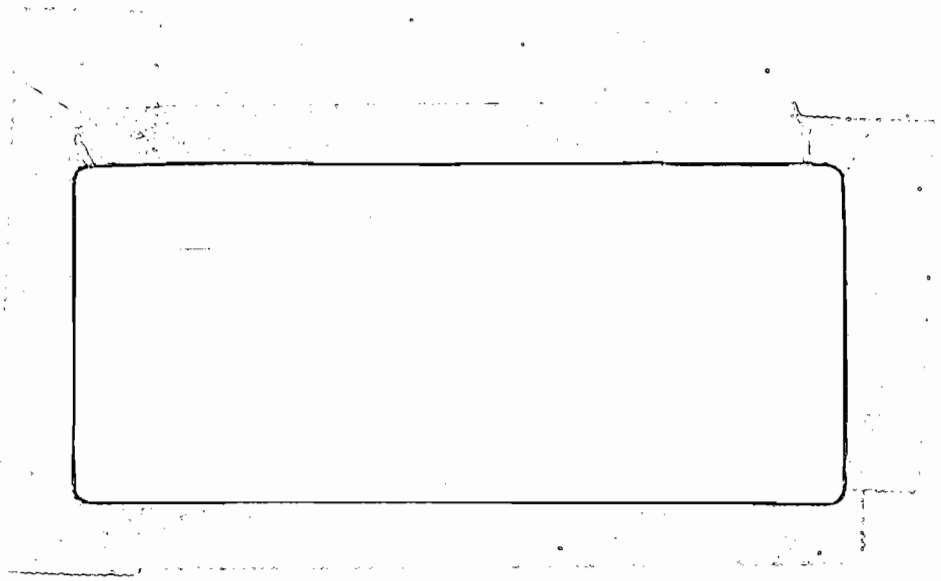

Golder Associates

AIR MODELING PROTOCOL
FOR
CLEWISTON AND BRYANT MILLS
UNITED STATES SUGAR CORPORATION

Prepared For:
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1.0 INTRODUCTION

United States Sugar Corporation (U.S. Sugar) owns and operates sugar mills at Bryant in Palm Beach County and at Clewiston in Hendry County. Future plans include shutting down the Bryant mill operations. As part of those plans, Bryant Boiler No. 5 is to be relocated to the Clewiston mill (named Boiler No. 3A at Clewiston). The proposed relocation will result in net emissions and air quality impact decreases at the Bryant mill and net emissions and air quality impact increases at the Clewiston mill. In anticipation of this shutdown, U.S. Sugar has requested that the Bryant and Clewiston mills be considered as a single facility for Title V and prevention of significant deterioration (PSD) new source review purposes. In response to this request, the Florida Department of Environmental Projection (FDEP) has requested that U.S. Sugar provide an air modeling protocol that outlines the models and modeling procedures to be followed for an air quality analysis that will achieve the following:

- Determine the existing air quality in the vicinity of the Bryant and Clewiston mills due to existing mill operations and compare the maximum air quality impacts at each mill with Florida ambient air quality standards (AAQS) and allowable PSD Class II increments. The air modeling analysis will address air quality impacts for sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter with aerodynamic diameters equal to or less than 10 microns (PM_{10}), and carbon monoxide (CO).
- Determine the air quality in the vicinity of the Bryant and Clewiston mills due to the future mill operations, i.e., after the shutdown of the Bryant mill and the relocation of Bryant Boiler No. 5 to the Clewiston mill. Compare the maximum air quality impacts at each mill with Florida AAQS and allowable PSD Class II increments. The analysis will address air quality impacts for SO_2, NO_2, PM_{10}, and CO.
- Determine impacts on the allowable PSD Class I increments at the Everglades National Park (ENP) for existing conditions and for future conditions after the Bryant Boiler No. 5 is relocated to Clewiston. The analysis will address air quality impacts from only the Bryant and Clewiston mills for SO_2, NO_2, and PM_{10}. A cumulative, detailed modeling analysis with all sources will be conducted only if the initial analysis demonstrates that the net change in maximum Class I impacts are above the PSD Class I significant impact levels. If the net change in predicted impacts are above the PSD Class I significant impact levels for any pollutant, then a detailed PSD Class I increment analysis will be performed for that pollutant for the future case of Boiler No. 3A at Clewiston.

The following sections present the air quality modeling protocol for the Clewiston-Bryant modeling analysis.

2.0 PROJECT DESCRIPTION

The Bryant mill consists of four bagasse/oil-fired boilers (Boiler Nos. 1, 2, 3 and 5). Each boiler has a wet scrubber for PM control. Boiler Nos. 1, 2, and 3 are each rated at 385 million British thermal units per hour (MMBtu/hr) heat input. These boilers were constructed during the time period 1962-1963. Boiler No. 5 is permitted at a heat input capacity of 671 MMBtu/hr, 1-hour average, and 583 MMBtu/hr, 24-hour average, and was constructed in 1979.

All boilers at the Bryant mill are permitted to burn No. 6 fuel oil with a maximum sulfur content of 0.70 percent. In addition, Boiler Nos. 1, 2, and 3 are limited to firing a combined 80,000 gallons of fuel oil per day.

The Clewiston mill consists of five bagasse/oil-fired boilers (Boiler Nos. 1, 2, 4, 7, and 8) with the following capacities:

- Boiler No. 1 is permitted at 495.6 MMBtu/hr, 24-hour average heat input;
- Boiler No. 2 at 447 MMBtu/hr, 24-hour average heat input;
- Boiler No. 4 at 633 MMBtu/hr, 1-hour average heat input and 600 MMBtu/hr, 24-hour average heat input;
- Boiler No. 7 at 812 MMBtu/hr, 1-hour average heat input, and 738 MMBtu/hr, 24-hour average heat input; and
- Boiler No. 8 at 1,185 MMBtu/hr, 1-hour average heat input (proposed) and 1,077 MMBtu/hr, 24-hour average heat input (proposed).

Boiler Nos. 1 and 2 began operating in 1968; Boiler No. 4 in 1985; Boiler No. 7 in 1997, and Boiler No. 8 in 2005.

Boiler Nos. 1, 2, and 4 have wet scrubbers for PM control, and Boiler Nos. 7 and 8 have electrostatic precipitators (ESPs) for PM control. Boiler No. 8 can also burn wood chips, and has a selective non-catalytic reduction (SNCR) system for control of NO_x emissions. All boilers at the Clewiston mill are permitted to burn No. 2 fuel oil with a maximum sulfur content of 0.05 percent.

The relative location of the Bryant and Clewiston mills is shown in Figure 2-1. This figure also shows U.S. Sugar's land holdings, which are devoted to sugarcane and citrus crops.

U.S. Sugar is planning the closing of the Bryant mill at the conclusion of the 2006-2007 sugarcane processing season (approximately April of 2007). At that time, U.S. Sugar plans on beginning the

relocation of Boiler No. 5 to the Clewiston mill. The remaining boilers (Boiler Nos. 1, 2, and 3) will no longer operate at the Bryant mill after that time.

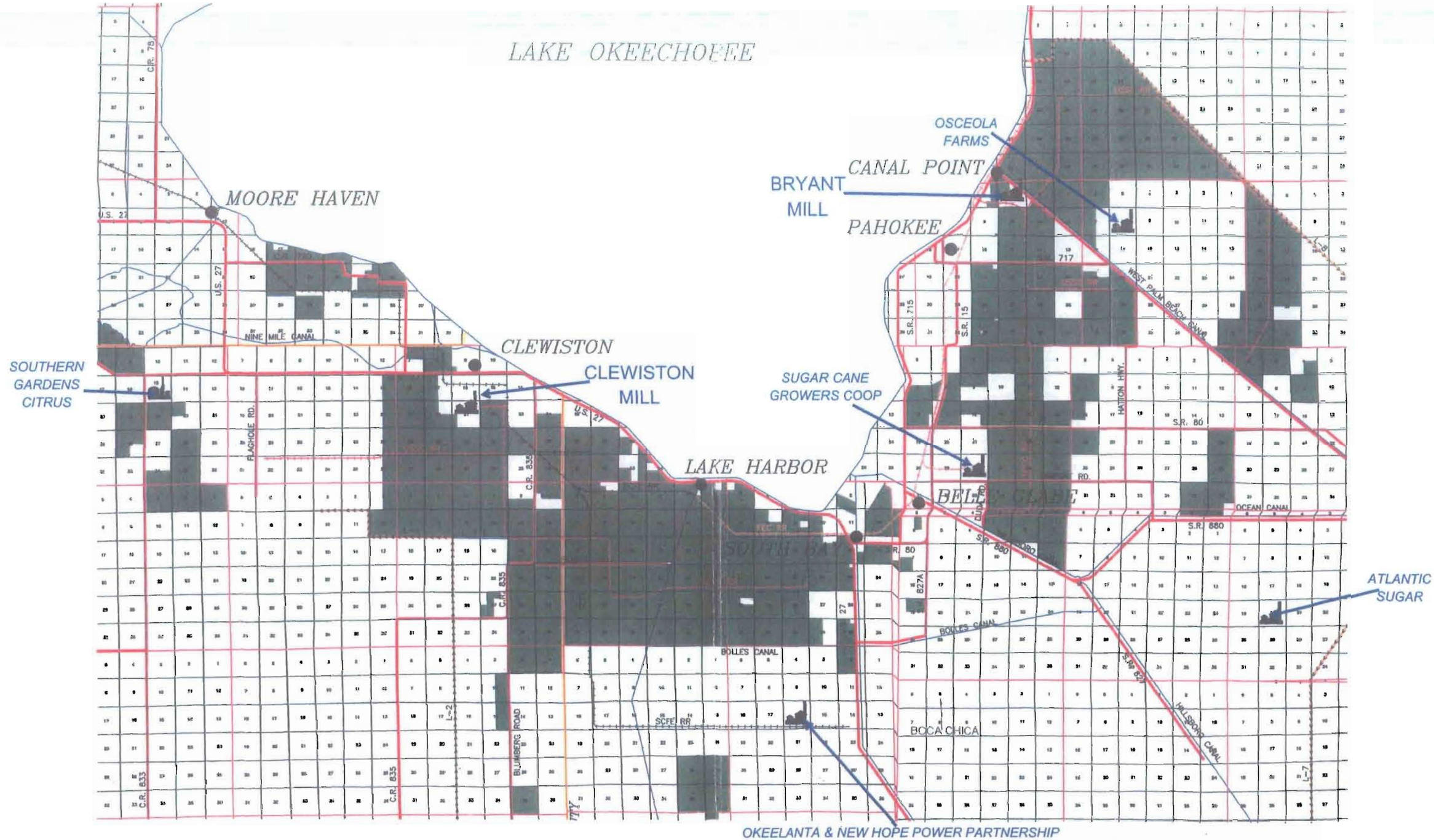

FIGURE 2-1
LOCATION OF U.S. SUGAR CLEWISTON AND BRYANT MILLS

Source: Golder, 2005.

0437584/4.4/Figure 2-1.pdf

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3.0 AIR QUALITY IMPACT ANALYSIS METHODOLOGY

3.1 Significant Impact Analysis

A significant impact analysis will be performed at the Clewiston mill for Boiler No. 3A only to quantify the maximum air quality impacts due to the new relocated boiler at that mill. A significant impact distance of 4 kilometers (km) will be assumed for each pollutant for the AAQS and PSD increment analyses at both the Clewiston and Bryant mills. A significant impact analysis will also be conducted for the ENP Class I area. The nearest PSD Class I area to the Clewiston mill site is the ENP, located about 102 km (60 miles) to the south.

3.2 AAQS and PSD Class II Increment Analyses

In general, when 5 years of meteorological data are used, the highest annual and the highest-second-highest (H2H) short-term concentrations are compared to the applicable AAQS and allowable PSD Class II increments. The AAQS and allowable PSD increments for the State of Florida are shown in Table 3-1. The H2H short-term concentration is calculated for a receptor field by:

1. Eliminating the highest concentration predicted at each receptor,
2. Identifying the second-highest concentration at each receptor, and
3. Selecting the highest concentration among these second-highest concentrations.

This approach is consistent with most air quality standards and all allowable PSD increments, which permit a short-term average concentration to be exceeded once per year at each receptor.

For the AAQS analysis, the current and future emissions of the mills are modeled with background emission facilities. The total air quality concentration is estimated by adding the maximum concentrations from all modeled sources to a non-modeled background concentration. The maximum annual and short-term total air quality concentrations are then compared to the AAQS.

For the PSD Class II increment analysis, the PSD increment consuming and expanding sources at the mills will be modeled with background PSD consuming or expanding sources. The maximum annual and short-term concentrations are compared to the allowable PSD Class II increments.

3.3 PSD Class I Increment Analysis

The nearest PSD Class I area to the Clewiston mill site is the ENP, located about 102 km (60 miles) to the south. There are no other PSD Class I areas located within 200 km of the site.

A cumulative PSD Class I increment analysis will be performed for those pollutants for which the net change in impacts due to the existing and future U.S. Sugar sources exceed the PSD Class I significant impact levels. For the initial PSD Class I increment analysis, the PSD increment consuming and expanding sources at the U.S. Sugar Clewiston and Bryant mills will be modeled alone for existing and future conditions. For the pollutants for which the net change in impacts exceed the PSD Class I significant impact levels, background PSD consuming or expanding sources located within 200 km of the ENP will also be modeled. The maximum annual and short-term concentrations will be compared to the allowable PSD Class I increments (see Table 3-1).

3.4 Model Selection

The selection of an air quality model to predict air quality impacts for this analysis was based on the ability of the model to simulate impacts in areas surrounding the Bryant and Clewiston mills, as well as at the PSD Class I area. Two air quality dispersion models were selected and used in these analyses to address air quality impacts. These models were:

- The American Meteorological Society and EPA Regulatory Model (AERMOD) dispersion model, and;
- The California Puff Model (CALPUFF).

The AERMOD dispersion model (Version 04300) is available on the EPA's Internet web site, Support Center for Regulatory Air Models (SCRAM), within the Technical Transfer Network (TTN). A listing of AERMOD model features is presented in Table 3-2.

On November 9, 2005, the EPA implemented AERMOD into its *Guideline of Air Quality Models (Appendix W to 40 CFR Part 51)* as the recommended model for regulatory modeling applications. The FDEP is allowing the use of AERMOD for air permitting projects as a replacement for the Industrial Source Complex Short-Term Model (ISCST3) which will no longer be in effect as of December 2006.

The EPA and FDEP recommend that the AERMOD model be used to predict pollutant concentrations at receptors located within 50 km from a source. The AERMOD model calculates

hourly concentrations based on hourly meteorological data. The AERMOD model is applicable for most applications since it is recognized as containing the latest scientific algorithms for simulating plume behavior in all types of terrain. For evaluating plume behavior within the building wake of structures, the AERMOD model incorporates the Plume Rise Model Enhancement (PRIME) downwash algorithm developed by the Electric Power Research Institute (EPRI). AERMOD can predict pollutant concentrations for averaging times of annual and 24-, 8-, 3-, and 1-hours.

The AERMOD model will be used to predict the maximum pollutant concentrations in nearby areas surrounding the U.S. Sugar Clewiston and Bryant mills. The predicted concentrations will then be compared to the applicable AAQS and PSD Class II increments.

For this analysis, the EPA regulatory default options were used to predict all maximum impacts. These options include:

- Final plume rise at all receptor locations
- Stack-tip downwash
- Buoyancy-induced dispersion
- Default wind speed profile coefficients
- Default vertical potential temperature gradients
- Calm wind processing

At distances beyond 50 km from a source, the CALPUFF model, Version 5.756 (EPA, 2006), is recommended for use by the EPA and FDEP. The CALPUFF model is a long-range transport Lagrangian puff model applicable for estimating the air quality impacts. The methods and assumptions used in the CALPUFF model were based on the latest recommendations for a refined analysis as presented in the Interagency Workgroup on Air Quality Materials (IWAQM) Phase 2 Summary Report and the FLAG document. This model is also maintained by the EPA on the SCRAM website. A listing of CALPUFF model features is presented in Table 3-3.

The CALPUFF model will be used to assess impacts at the PSD Class I area of the ENP, located about 102 km from the Clewiston mill. The predicted concentrations will be compared to the applicable PSD Class I significant impact levels and allowable increments.

3.5 Meteorological Data

Meteorological data used in the AERMOD model to determine air quality impacts will consist of a concurrent 5-year period of hourly surface weather observations from the National Weather Service

(NWS) office located at the Palm Beach International Airport (PBI) and twice-daily upper air soundings collected at the Florida International University (FIU) in Miami for the years 2001 through 2005. The NWS office at PBI is located approximately 82 km (51 miles) east of the Clewiston mill site and is the closest primary weather station to the study area considered to have meteorological data representative of the site. The meteorological data from this NWS station have been used for numerous air modeling studies within the sugar industry and for the Clewiston and Bryant mills.

The meteorological data has been obtained and processed by the FDEP into a format that is suitable for input to AERMOD using the meteorological preprocessor program AERMET.

CALMET, the meteorological preprocessor to CALPUFF, was used to develop a 3-dimensional wind field necessary to perform the air modeling analysis to evaluate pollutant impacts at the ENP. The modeling domains have a 4-km cell resolution and have been developed by the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) for visibility modeling for determining Best Available Retrofit Technology (BART) under the Regional Haze regulations. The FDEP has requested the use of the BART domains for predicting air quality impacts with CALPUFF at locations beyond 50 km from a facility.

3.6 Emission Inventory

3.6.1 U.S. Sugar Mills

As described previously, both the existing and future air quality surrounding both the Clewiston and Bryant mills will be portrayed through a modeling analysis. The following primary scenarios will be modeled:

- Bryant mill area
  - Existing conditions – crop season only
  - Future conditions – crop season only
- Clewiston mill area
  - Existing conditions – crop season
  - Existing conditions – off-season
  - Future conditions – crop season
  - Future conditions – off-season

The Bryant mill only operates during the crop season (sugarcane processing season), and therefore modeling will be performed for this season only for the area surrounding the Bryant mill. The Clewiston mill operates a sugar refinery during the off-season, and therefore modeling will be performed for both the crop season and off-season for the area surrounding the Clewiston mill

The existing air quality surrounding the Bryant and Clewiston mills will be portrayed by modeling the current permitted or maximum emissions from the emissions units at each mill. The future air quality surrounding the Bryant and Clewiston mills will be portrayed by modeling the future permitted or maximum emissions from the future emissions units at each mill.

The future conditions for both areas will reflect the shutdown of the Bryant mill and the relocation of Bryant Boiler No. 5 to the Clewiston mill, where it will be renamed Boiler No. 3A. For the relocated Boiler No. 3A, its future maximum steam production rate and heat input rate are assumed to be the same as Boiler No. 4 at Clewiston. Although final design information for Boiler No. 3A has not yet been developed, Boiler No. 3A is very close in size and design to Boiler No. 4, and so this assumption was made, which also adds some simplification to the modeling analysis. Current plans are to locate Boiler No. 3A between the existing Boiler No. 2 and Boiler No. 4 at Clewiston. Its existing stack (150 foot tall) will be moved with the boiler and utilized at Clewiston.

For all modeling scenarios, boiler loads will be considered. At both mills, the boilers tend to operate normally at about 75 percent of maximum load during the crop season. Therefore, both 100 percent load and 75 percent load cases will be modeled at both mills for the crop season cases. For the off-season operation, the Clewiston mill boilers can operate as low as 50 percent load; therefore, 100-, 75-, and 50-percent loads will be modeled. Allowable or maximum estimated emissions will be used in each case, as required by modeling analysis for regulatory purposes.

Existing Bryant Mill- Crop Season

The existing crop season SO_2, NO_x, PM_{10}, and CO emissions for all sources at the U.S. Sugar Bryant mill are presented in Appendix A, Tables A-1 through A-4, respectively. The maximum existing SO_2 emissions for the 3-hour and 24-hour averaging times, for both 100 percent and 75 percent load conditions, are presented in Table A-1. The emissions reflect the existing fuel oil burning limitations and sulfur content. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing PM_{10} emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-2. The maximum emissions are based on bagasse firing, since bagasse results in the worst-case emissions. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing CO emissions for the 1-hour and 8-hour averaging times, for both 100 percent and 75 percent load conditions, are presented in Table A-3. The maximum emissions are based on bagasse firing, which is the worst-case fuel.

The maximum existing NO_x emissions for the 24-hour averaging time for 75 percent load conditions are presented in Table A-4. Since only annual average AAQS and PSD increments exist for NO_2, the 75 percent load condition representative of average operation was used. The maximum emissions are based on maximum fuel oil firing in each boiler, with the remainder of heat input due to bagasse firing, since fuel oil firing results in the worst-case emissions. The 24-hour average emissions will be used for the annual averaging time modeling.

Existing Clewiston Mill – Crop Season

The existing crop season SO_2, NO_x, PM_{10}, and CO emissions for all boilers at the U.S. Sugar Clewiston mill are presented in Tables A-5 through A-9, respectively. The maximum existing SO_2 emissions for the 3-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-5. The maximum existing SO_2 emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-6. Since the fuel oil sulfur content is limited to 0.05 percent (equivalent to 0.055 lb/MMBtu), bagasse firing represents the worst-case condition (maximum emissions based on 0.06 lb/MMBtu). The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing PM_{10} emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-7. Worst-case emissions are based on bagasse firing. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing CO emissions for the 1-hour and 8-hour averaging times, for both 100 percent and 75 percent load conditions, are presented in Table A-8. The maximum emissions are due to bagasse firing.

The maximum existing NO_x emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-9. The maximum emissions are based on either bagasse firing only, or maximum fuel oil firing with the remainder of heat input from bagasse, depending on the NO_x emission factors for each boiler. The 24-hour average emissions will be used for the annual averaging time modeling.

The maximum emissions associated with the sugar refinery and other minor sources at the Clewiston mill are shown in Tables A-10 and A-11. The refinery sources operate year-around at the Clewiston mill.

Existing Clewiston Mill – Off- Season

The existing off-season SO_2, NO_x, PM_{10}, and CO emissions for all boilers at the U.S. Sugar Clewiston mill are presented in Tables A-12 through A-16, respectively. For each pollutant, emissions are shown for 100 percent, 75 percent, and 50 percent load conditions. Two scenarios (Boiler Nos. 1, 2, and 4; and Boiler Nos. 7 and 8) can operate during the off-season, and are portrayed for each load case.

The maximum existing off-season SO_2 emissions for the 3-hour averaging time are presented in Table A-12. The maximum existing off-season SO_2 emissions for the 24-hour averaging time are presented in Table A-13. Since the fuel oil sulfur content is limited to 0.05 percent (equivalent to 0.055 lb/MMBtu), bagasse firing represents the worst-case condition (maximum emissions based on 0.06 lb/MMBtu). The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing off-season PM_{10} emissions for the 24-hour averaging time are presented in Table A-14. Worst-case emissions are based on bagasse firing. As shown, the scenario of Boiler Nos. 1, 2, and 4 operating has much higher emissions that the scenario of Boiler Nos. 7 and 8 operating. In addition, Boiler Nos. 1, 2, and 4 have lower stack heights and lower exit gas temperatures compared to Boiler Nos. 7 and 8. Therefore, only the scenario of Boiler Nos. 1, 2, and 4 operating will be modeled for PM_{10} emissions. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing off-season CO emissions for the 1-hour and 8-hour averaging times are presented in Table A-15. The maximum emissions are due to bagasse firing. As shown, the scenario

of Boiler Nos. 1, 2, and 4 operating has much higher emissions than the scenario of Boiler Nos. 7 and 8 operating. Therefore, only the scenario of Boiler Nos. 1, 2, and 4 operating will be modeled for CO emissions.

The maximum existing off-season NO_x emissions for the 24-hour averaging time are presented in Table A-16. The maximum emissions are based on either bagasse firing only, or maximum fuel oil firing with the remainder of heat input from bagasse, depending on the NO_x emission factors for each boiler. The 24-hour average emissions will be used for the annual averaging time modeling.

The maximum emissions associated with the sugar refinery and other minor sources at the Clewiston mill were described previously. The refinery sources operate year-around at the Clewiston mill.

Future Clewiston Mill – Crop Season

The future crop season SO_2, NO_x, PM_{10}, and CO emissions for all boilers at the U.S. Sugar Clewiston mill, including the relocated Boiler No. 3A, are presented in Tables A-17 through A-22, respectively. The maximum future SO_2 emissions for the 3-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-17. The maximum existing SO_2 emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-18. Since the fuel oil sulfur content will continue to be limited to 0.05 percent (equivalent to 0.055 lb/MMBtu), bagasse firing represents the worst-case condition (maximum emissions based on 0.06 lb/MMBtu). The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum future PM_{10} emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-19. Worst-case emissions are based on bagasse firing. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum existing CO emissions for the 1-hour and 8-hour averaging times, for both 100 percent and 75 percent load conditions, are presented in Table A-20. The maximum emissions are due to bagasse firing.

The maximum existing NO_x emissions for the 24-hour averaging time, for both 100 percent and 75 percent load conditions, are presented in Table A-21. The maximum emissions are based on either bagasse firing only, or maximum fuel oil firing with the remainder of heat input from bagasse,

depending on the NO_x emission factors for each boiler. The 24-hour average emissions will be used for the annual averaging time modeling.

The maximum emissions associated with the sugar refinery and other minor sources at the Clewiston mill were presented in Table A-10 and A-11. The refinery sources operation will not change in the future at the Clewiston mill.

Future Clewiston Mill – Off- Season

During the off-season at Clewiston, the sugar refinery only needs an amount of steam that can be supplied by one to three boilers operating at any one time. The current Title V permit for the Clewiston mill allows Boiler Nos. 1, 2, and 4 to operate any time Boiler No. 7 is shutdown. In addition, total steam production from these boilers during the off-season is limited to 615,000 lb/hr, 3-hour average, and 450,000 lb/hr as a 24-hour average. However, these limitations were imposed due to SO_2 emissions from burning up to 2.5 percent sulfur fuel oil, and the associated ambient air quality impacts on Class II PSD increments. Since U.S. Sugar now burns 0.05 percent sulfur fuel oil in all its boilers, and will in the future (including the relocated Boiler No. 3A), these steam production limitations are no longer necessary.

The modeling analysis will demonstrate compliance with all ambient air quality standards and PSD increments under the off-season operating scenarios shown in the following table. As explained in the following text, certain of these off-season operating scenarios will clearly result in higher impacts than other scenarios due to higher emissions and/or lower stack heights.

Off-Season Operating Scenario	**Modeled Pollutants (100%, 75% and 50% Loads)**			
	SO_2	**PM_{10}**	**CO**	**NO_x**
Boiler Nos. 1, 2 and 4				
(A) Boiler Nos. 1, 2, and 3A	X	X	X	
Boiler Nos. 7 and 1				
Boiler Nos. 7 and 2				
Boiler Nos. 7 and 4				
(B) Boiler Nos. 7 and 8	X			X
(C) Boiler Nos. 7 and 3A	X			
(D) Boiler Nos. 4 and 3A	X	X	X	X

The future off-season SO_2, NO_x, PM_{10}, and CO emissions for all boilers at the U.S. Sugar Clewiston mill are presented in Tables A-22 through A-26, respectively. For each pollutant, emissions are shown for 100 percent, 75 percent, and 50 percent load conditions. As shown above, there are potentially eight operating scenarios. However, two scenarios (Boiler Nos. 1, 2, and 4; and Boiler Nos. 1, 2, and 3A) are similar in regard to maximum emissions, and stack parameters are similar, except that Boiler No. 3A exhibits a lower stack gas flow rate than Boiler No. 4 (refer to Table A-27). As a result, the scenario of Boiler Nos. 1, 2, and 3A operating was modeled.

Boiler No. 7 may operate with any other single boiler in the future. For SO_2 and NO_x emissions, Boiler Nos. 7 and 8 operating together is the worst case for emissions, so this case will be modeled. Of the remaining boilers (1, 2, 4, and 3A), the scenario of Boiler No. 7 and Boiler No. 3A operating together represents the worst case for SO_2 emissions due to Boiler No. 3A emissions and stack parameters. For PM_{10} and CO emissions, the scenario of Boiler No. 1, 2, and 3A operating will have higher impacts than Boiler Nos. 7 and 8 operating or Boiler Nos. 7 and 3A operating, due to higher total emissions and less favorable stack parameters. Therefore, Boiler Nos. 7 and 8 operating or Boiler Nos. 7 and 3A operating will not be modeled for these pollutants.

Boiler Nos. 4 and 3A operating together will be modeled for all pollutants because of their lower stack heights, which may produce higher impacts.

The maximum future off-season SO_2 emissions for the 3-hour averaging time are presented in Table A-22. The maximum existing SO_2 emissions for the 24-hour averaging time are presented in Table A-23. Since the fuel oil sulfur content will be limited to 0.05 percent (equivalent to 0.055 lb/MMBtu), bagasse firing represents the worst-case condition (maximum emissions based on 0.06 lb/MMBtu). The 24-hour average emissions will also be used for the annual averaging time modeling. All four scenarios shown will be modeled to determine the worst-case scenario.

The maximum future off-season PM_{10} emissions for the 24-hour averaging time are presented in Table A-24. Worst-case emissions are based on bagasse firing. Two scenarios (A and D) will be modeled. As shown, the scenarios of Boiler Nos. 1, 2, and 3A operating or Boiler Nos. 4 and 3A operating have much higher emissions than the scenario of Boiler Nos. 7 and 8 operating. In addition, Boiler Nos. 1, 2, and 3A have lower stack heights and lower exit gas temperatures compared to Boiler Nos. 7 and 8. Therefore, the scenario of Boiler Nos. 7 and 8 operating will not be modeled for PM_{10} emissions. The 24-hour average emissions will also be used for the annual averaging time modeling.

The maximum future off-season CO emissions for the 1-hour and 8-hour averaging times are presented in Table A-25. The maximum emissions are due to bagasse firing. As for PM_{10}, two scenarios (A and D) will be modeled. As shown, the scenario of Boiler Nos. 1, 2, and 3A or Boiler Nos. 4 and 3A operating have much higher emissions than the scenario of Boiler Nos. 7 and 8 operating. Therefore, the scenario of Boiler Nos. 7 and 8 operating will not be modeled for CO emissions.

The maximum future off-season NO_x emissions for the 24-hour averaging time are presented in Table A-26. The maximum emissions are based on either bagasse firing only, or maximum fuel oil firing with the remainder of heat input from bagasse, depending on the NO_x emission factors for each boiler. The 24-hour average emissions will be used for the annual averaging time modeling. Two scenarios (B and D) will be modeled. As shown, the scenarios of Boiler Nos. 7 and 8 operating or Boiler Nos. 4 and 3A operating have higher emissions than the scenario of Boiler Nos. 1, 2, and 3A operating. In addition, Boiler Nos. 1 and 2 have higher stack heights than Boiler Nos. 4 and 3A. Therefore, the scenario of Boiler Nos. 1, 2, and 9 operating will not be modeled for NO_x emissions.

The maximum emissions associated with the sugar refinery and other minor sources at the Clewiston mill were described previously. The refinery sources operate year-around at the Clewiston mill.

Stack Parameters and Source Locations

Stack parameters and source locations which will be used in the existing and future modeling analysis for the Bryant mill are presented in Table A-27. Stack parameters and source locations used in the existing and future modeling analysis for the Clewiston mill are presented in Tables A-28 and A-29.

A plot plan showing the locations of stacks and buildings at the Bryant mill is presented in Figure 3-1. A plot plan showing the locations of stacks and buildings at the Clewiston mill is presented in Figure 3-2.

3.6.2 Other Emission Sources

The SO_2 emission inventories for background facilities were developed from databases obtained from the FDEP, from previous air modeling studies performed by Golder, and from air permit data. Background sources in these inventories that were located within the project's modeling area (defined as the PSD Class II significant impact area) will be included in the modeling.

For sources located in the screening area [defined as the distance between the Clewiston and Bryant Mills (34km) plus 50 km beyond the modeling area], a technique was used for eliminating sources in the modeling analyses if the source's emissions are below a specified criterion. This technique, which is approved for use by the FDEP and the EPA, is the *Screening Threshold* method, developed by the North Carolina Department of Natural Resources and Community Development. The method is designed to objectively eliminate from the emission inventory those sources that are unlikely to have a significant interaction with the source undergoing evaluation. In general, sources that should be considered in the modeling analyses are those with emissions greater than a screening threshold value [(in tons per year (TPY)] that is calculated by the following criteria:

$$Q = 20 \times D$$

where: Q = the screening threshold value (TPY), and

D = the distance (km) from the source or project undergoing evaluation to the background source for short-term analysis, or the distance (km) from the edge of the project's significant impact area to the background source for long-term (annual) analysis.

For this analysis, the long-term criterion was used since fewer facilities would be eliminated than with the short-term criterion. Also, the total emissions from a facility were used rather than emissions from individual sources for comparison to the screening threshold value. These methods result in a more conservative approach to produce higher-than-expected concentrations. Those facilities with maximum or allowable emissions that are below the calculated *screening threshold* were eliminated from further consideration in the AAQS and PSD increment modeling analyses.

A summary of SO_2 emitting facilities considered for inclusion in the AAQS and PSD Class II increment modeling analysis is provided in Appendix B, Table B-1. This summary identifies those facilities located within the project's modeling area (4 km) and screening area (4 to 88 km). The facilities that will not be included in the modeling analyses because their emissions were less than the *screening threshold* criteria are also identified. Facilities located beyond 88 km but within 134 km with very large emissions will also be included in the modeling.

The individual source emission rates and stack and operating parameters for the SO_2 AAQS and PSD Class II modeling analyses were developed and are presented in Table B-2. Each source includes a description of the source, the identification name of the source used in the air modeling analysis, and

a determination of whether the source consumes or expands PSD increment. It should be noted that facilities with PSD-affecting sources may have baseline sources. Baseline sources may no longer operate but did operate during the SO_2 PSD baseline period of 1974 to 1975. Sources that expand PSD increment are represented in the PSD increment air modeling analyses as negative emission sources.

Similar to the SO_2 source inventory, the PM_{10}, CO, and NO_x source inventories for inclusion in the AAQS and PSD Class II increment modeling analysis is provided in Appendix B, Tables B-3, B-5, and B-7, respectively. The individual source emission rates and stack and operating parameters for the PM_{10}, CO and NO_x AAQS and PSD Class II modeling analyses are presented in Tables B-4, B-6, and B-8, respectively.

A summary of SO_2-emitting facilities considered for inclusion in the PSD Class I increment modeling analysis is provided in Table B-9. This summary identifies those facilities located within 250 km of the ENP. The individual source emission rates and stack and operating parameters for the PSD Class I modeling analyses were developed and are presented in Table B-10.

Source inventories for the PM_{10} and NO_x Class I analysis have not been developed at this time. It is believed that net change in impacts due to U.S. Sugar's proposed boiler relocation itself will not be significant at the Class I area. In the event that it is, significant, appropriate source inventories will be developed and submitted to FDEP prior to performing the Class I PSD increment modeling.

3.7 Building Downwash Effects

The building dimensions which will be used in the modeling analysis for the Bryant and Clewiston mills are presented in Tables 3-4 and 3-5, respectively. A portrayal of these buildings and stack locations are presented in Figure 3-3 for Bryant and in Figure 3-4 for Clewiston.

Based on the building dimensions associated with buildings and structures at the plant, all stacks at the Bryant and Clewiston mills will comply with the good engineering practice (GEP) stack height regulations. However, as these actual stack heights are less than GEP height, the potential for building downwash to occur will be evaluated in the air modeling analysis for these stacks.

For the modeling analyses, direction-specific building dimensions will be input for 36 radial directions, with each direction representing a 10-degree sector. All direction-specific building parameters will be calculated with the Building Profile Input Program (BPIP), Version 04274, which

incorporates the Plume Rise Enhancement (PRIME) algorithms developed by the Electric Power Research Institute (EPRI). The BPIP program will be used to generate building data for the AERMOD model input.

3.8 Receptor Locations

To predict maximum concentrations in the vicinity of both the Bryant and Clewiston mills, receptor grids will be used that extend to 4 km from each mill. Each mill's receptor grid will be developed in Universal Transverse Mercator (UTM) coordinate system, zone 17, North American Datum 1927 (NAD27), and include the following:

- 50-m intervals along the fence line or restricted property boundary,
- 100-m intervals beyond the fence line to 2 km from the mill, and
- 500-m intervals from 2 to 4 km from the mill.

Receptor elevations and hill scale heights for all receptors will be obtained from 7.5-minute USGS Digital Elevation Model (DEM) data using the AERMOD terrain preprocessor program AERMAP, Version 04300.

A graphic portrayal of the receptor locations and property boundaries for each mill is shown in Figures 3-5 and 3-6.

Concentrations at the PSD Class I area of the ENP will be predicted using 901 ENP receptors provided by the National Park Service. This includes all NPS boundary receptors and interior section receptors of the ENP. The receptor locations are portrayed in Figure 3-7.

3.9 Background Concentrations

Total air quality impacts will be predicted for the AAQS analysis by adding the maximum annual and H2H short-term concentrations due to all modeled sources to estimated background concentrations. Background concentrations are concentrations due to sources not explicitly included in the modeling analysis. These concentrations consist of two components:

- Impacts due to other non-modeled emission sources (i.e., point sources not explicitly included in the modeling inventory), and
- Natural and fugitive emission sources.

Background concentrations are necessary to determine total ambient air quality impacts to demonstrate compliance with the AAQS. Background concentrations are defined as concentrations due to sources other than those specifically included in the modeling analysis. For all pollutants, background would include other point sources not included in the modeling (i.e., distant sources or small sources), fugitive emission sources, and natural background sources.

A summary of ambient SO_2, NO_2, PM_{10}, and CO data for the ambient monitors located nearest to the U.S. Sugar Bryant and Clewiston mills, is presented in Tables 3-6 through 3-9 These monitors are located in Palm Beach County. Data are presented for 2004 through mid-2006. The monitoring data show that ambient concentrations were below the AAQS for each pollutant. For purposes of the modeling analysis, the H2H short-term and maximum annual average values were selected to represent ambient background concentrations for the respective averaging times, as shown in the following table.

Pollutant	Averaging Period	Background Concentration ($\mu g/m^3$)
SO_2	3-hour	8
	24-hour	8
	Annual	3
PM_{10}	24-hour	42
	Annual	24
CO	1-hour	4,255
	8-hour	2,530
NO_2	Annual	19

TABLE 3-1
NATIONAL AND STATE AAQS, ALLOWABLE PSD INCREMENTS, AND SIGNIFICANT IMPACT LEVELS

Pollutant	Averaging Time	AAQS ($\mu g/m^3$)			PSD Increments ($\mu g/m^3$)		Significant Impact Levels[d] ($\mu g/m^3$)	
		National Primary Standard	National Secondary Standard	State of Florida	Class I	Class II	Class I	Class II
Particulate Matter (PM_{10})[a]	Annual Arithmetic Mean	50	50	50	4	17	0.2	1
	24-Hour Maximum	150[b]	150[b]	150[b]	8	30	0.3	5
Sulfur Dioxide	Annual Arithmetic Mean	80	NA	60	2	20	0.1	1
	24-Hour Maximum	365[b]	NA	260[b]	5	91	0.2	5
	3-Hour Maximum	NA	1,300[b]	1,300[b]	25	512	0.3	25
Carbon Monoxide	8-Hour Maximum	10,000[b]	10,000[b]	10,000[b]	NA	NA	NA	500
	1-Hour Maximum	40,000[b]	40,000[b]	40,000[b]	NA	NA	NA	2,000
Nitrogen Dioxide	Annual Arithmetic Mean	100	100	100	2.5	25	0.1	1
Ozone[e]	1-Hour Maximum	235[c]	235[c]	235[c]	NA	NA	NA	NA
Lead	Calendar Quarter Arithmetic Mean	1.5	1.5	1.5	NA	NA	NA	NA

Note: Particulate matter (PM_{10}) = particulate matter with aerodynamic diameter less than or equal to 10 micrometers.
NA = Not applicable, i.e., no standard exists.

[a] On October 17, 2006, EPA promulgated revised AAQS for particulate matter. The form of the 24-hour PM_{10} standard was changed; compliance is achieved when the expected number of exceedances is less than or equal to 1 over a 3-year period.

[b] Short-term maximum concentrations are not to be exceeded more than once per year.

[c] Achieved when the expected number of days per year with concentrations above the standard is fewer than 1.

[d] Maximum concentrations. EPA has proposed Class I significant impact levels.

[e] On July 18, 1997, EPA promulgated revised AAQS for ozone. The ozone standard was modified to be 0.08 ppm for 8-hour average; achieved when 3-year average of 99th percentile is 0.08 ppm or less. FDEP has not yet adopted these standards.

Sources: Federal Register, Vol. 43, No. 118, June 19, 1978. 40 CFR 50. 40 CFR 52.21. Rule 62-204, F.A.C.

TABLE 3-2
MAJOR FEATURES OF THE AERMOD MODEL, VERSION 04300

AERMOD Model Features
• Plume dispersion/growth rates are determined by the profile of vertical and horizontal turbulence, vary with height, and use a continuous growth function.
• In a convective atmosphere, uses three separate algorithms to describe plume behavior as it comes in contact with the mixed layer lid; in a stable atmosphere uses a mechanically mixed layer near the surface.
• Polar or Cartesian coordinate systems for receptor locations can be included directly or by an external file reference.
• Urban model dispersion is input as a function of city size and population density; sources can also be modeled individually as urban sources.
• Stable plume rise: uses Briggs equations with winds and temperature gradients at stack top up to half-way up to plume rise. Convective plume rise: plume superimposed on random convective velocities.
• Procedures suggested by Briggs (1974) for evaluating stack-tip downwash.
• Has capability of simulating point, volume, area, and multi-sized area sources.
• Accounts for the effects of vertical variations in wind and turbulence (Brower *et al.*, 1998).
• Uses measured and computed boundary layer parameters and similarity relationships to develop vertical profiles of wind, temperature, and turbulence (Brower *et al.*, 1998).
• Concentration estimates for 1-hour to annual average times.
• Creates vertical profiles of wind, temperature, and turbulence using all available measurement levels.
• Terrain features are depicted by use of a controlling hill elevation and a receptor point elevation.
• Modeling domain surface characteristics are determined by selected direction and month/season values of surface roughness length, Albedo, and Bowen ratio.
• Contains a mechanical and convective mixed layer height, the latter based on the hourly accumulation of sensible heat flux.
• The method of Pasquill (1976) to account for buoyancy-induced dispersion.
• A default regulatory option to set various model options and parameters to EPA-recommended values.
• Contains procedures for calm-wind and missing data for the processing of short term averages.

Note: AERMOD = the American Meteorological Society and Environmental Protection Agency Regulatory Model.

Source: Paine *et al.*, 2004.

TABLE 3-3
MAJOR FEATURES OF THE CALPUFF MODEL, VERSION 5.756

CALPUFF Model Features

- Source types: Point, line (including buoyancy effects), volume, and area (buoyant, non-buoyant)
- Non-steady-state emissions and meteorological conditions (time-dependent source and emission data; gridded 3-dimensional wind and temperature fields; spatially-variable fields of mixing heights, friction velocity, precipitation, Monin-Obukhov length; vertically and horizontally-varying turbulence and dispersion rates; time-dependent source and emission data for point, area, and volume sources; temporal or wind-dependent scaling factors for emission rates)
- Efficient sampling function (integrated puff formulation; elongated puff (slug) formation)
- Dispersion coefficient options (Pasquill-Gifford (PG) values for rural areas; McElroy-Pooler values (MP) for urban areas; CTDM values for neutral/stable; direct measurements or estimated values)
- Vertical wind shear (puff splitting; differential advection and dispersion)
- Plume rise (buoyant and momentum rise; stack-tip effects; building downwash effects; partial plume penetration above mixing layer)
- Building downwash effects (Huber-Snyder method; Schulman-Scire method)
- Complex terrain effects (steering effects in CALMET wind field; puff height adjustments using ISC model method or plume path coefficient; enhanced vertical dispersion used in CTDMPLUS)
- Subgrid scale complex terrain (CTSG option) (CTDM flow module; dividing streamline as in CTDMPLUS)
- Dry deposition (gases and particles; options for diurnal cycle per pollutant, space and time variations with a resistance model, or none)
- Overwater and coastal interaction effects (overwater boundary layer parameters; abrupt change in meteorological conditions, plume dispersion at coastal boundary; fumigation; option to use Thermal Internal Boundary Layers (TIBL) into coastal grid cells)
- Chemical transformation options (Pseudo-first-order chemical mechanisms for SO_2, SO_4, HNO_3, and NO_3; Pseudo-first-order chemical mechanisms for SO_2, SO_4, NO, NO_2, HNO_3, and NO_3 (RIVAD/ARM3 method); user-specified diurnal cycles of transformation rates; no chemical conversions)
- Wet removal (scavenging coefficient approach; removal rate as a function of precipitation intensity and type)
- Graphical user interface
- Interface utilities (scan ISC-PRIME and AUSPLUME meteorological data files for problems; translate ISC-PRIME and AUSPLUME input files to CALPUFF input files)

Note: CALPUFF = California Puff Model

Source: EPA, 2006.

TABLE 3-4
U.S. SUGAR BRYANT MILL BUILDING DIMENSIONS USED IN THE AIR MODELING ANALYSIS

Structure	Height (ft)	Height (m)	Length (ft)	Length (m)	Width (ft)	Width (m)
Boiler Room, Upper Tier	82.8	25.2	59	18.0	40	12.2
Boiler Room, Lower Tier	61.0	18.6	260	79.2	30	9.1
Power House, North Tier	60.3	18.4	64	19.5	40	12.2
Power House, South Tier	42.0	12.8	80	24.4	64	19.5
Mill Bldg	57.0	17.4	230	70.1	84	25.6
Boiling House	102.0	31.1	160	48.8	150	45.7
NW Tier of Boiling House	66.8	20.3	60	18.3	56	17.1
Warehouse #2	55.0	16.8	765	233.2	140	42.7
Chemical Storage, (#4)	31.0	9.4	90	27.4	60	18.3
Warehouse #3	55.0	16.8	515	157.0	130	39.6
Warehouse #4	55.0	16.8	680	207.3	125	38.1
Warehouse #1	78.6	24.0	265	80.8	150	45.7
Shop	51.3	15.6	85	25.9	85	25.9
Water Treatment Plant	42.8	13.0	50	15.2	50	15.2

TABLE 3-5
SUMMARY OF BUILDING STRUCTURES CONSIDERED IN THE AIR MODELING ANALYSIS
U.S. SUGAR CLEWISTON MILL

Structure	Height		Length[a]		Width[b]	
	ft	m	ft	m	ft	m
Boiler No. 8 Structures						
Boiler No. 8 Building	98	29.9	127	38.8	72	22.1
Boiler No. 8 ESP	69	21.0	59	18.0	54	16.5
Refinery Buildings						
Electrical Equipment	100	30.5	96	29.1	28	8.4
Support Structure	130	39.6	96	29.1	76	23.2
Dryer Area	100	30.5	96	29.1	39	11.9
Screening & Distribution Towers	150	45.7	126	38.5	69	20.9
Specialty Packaging Facility	40	12.2	82	25.0	202	61.4
Packaging Facility	40	12.2	65	19.8	280	85.3
Warehouse	28	8.5	340	103.5	290	88.3
Electrical & Conditioning Equipment	24	7.3	60	18.2	52	15.9
Bulk Loading	40	12.2	84	25.7	54	16.4
Sugar Silos	136	41.5	112	34.0	68	20.8
Other Mill Buildings						
Pellet Warehouse	46	14.0	527	160.6	105	32.0
RO Plant	51	15.5	39	12.0	20	6.0
Storage and Safety Mechanic	35	10.6	61	18.5	55	16.8
Power House	34	10.4	116	35.3	142	43.3
Boiler No. 1&2 Building	67	20.5	119	36.2	84	25.6
Boiler No. 4 Building	88	26.7	61	18.5	55	16.8
Boiler No. 7 ESP	88	26.7	62	18.8	36	11.0
Boiler No. 7 Building	93	28.3	120	36.6	113	34.4
C Mill Building (C-Tandem)	82	25.0	223	68.0	97	29.6
Evaporators	100	30.5	186	56.8	140	42.6
B Mill Building (B-Tandem)	68	20.7	223	68.0	75	22.9
Process Building	94	28.6	243	74.1	145	44.1
Sugar Warehouse #3	55	16.8	140	42.7	780	237.7
Sugar Warehouse #4	55	16.8	140	42.7	1783	543.5
Sugar Warehouse #5	55	16.8	140	42.7	963	293.5
Clarifiers	56	17.1	100	30.5	124	37.8
Central Control Room	20	6.1	209	63.7	103	31.4
Cooling Tower	53	16.2	77	23.3	53	16.0
B_CPVS	100	30.5	74.9	22.8	50	15.4
Boiler No. 9 Building (Future)	88	26.8	60.8	18.5	50.7	15.5
PSD Baseline Buildings						
A Mill Building (A-Tandem)	69	21.0	243	74.1	67	20.4
Sugar Warehouse #1	37	11.3	391	119.0	104	31.6
Boiler No. 5&6 Building	56	17.1	118	36.0	66	20.1

[a] North-South dimension.

[b] East-West dimension.

TABLE 3-6
SUMMARY SO_2 AMBIENT CONCENTRATION DATA
COLLECTED NEAR THE U.S. SUGAR CLEWISTON MILL

County	Site ID No.	Location	Year	Number of Observations	2nd Maximum 3-Hour Concentration		2nd Maximum 24-Hour Concentration		Annual Concentration	
					ppm	$\mu g/m^3$	ppm	$\mu g/m^3$	ppm	$\mu g/m^3$
Palm Beach	12-099-3004	Riviera Beach	2005	7,352	0.003	8	0.003	8	0.0012	3
			2004	5,647	0.002	5	0.001	3	0.0010	3

Note: $\mu g/m^3$ = micrograms per cubic meter
ppm = parts per million
1 ppm SO_2 = 2,620 $\mu g/m^3$
Source: EPA, Air Quality System, Quick Look Report; 2004 - 2006.

TABLE 3-7
SUMMARY OF MAXIMUM PM10 CONCENTRATIONS MEASURED NEAR THE CLEWISTON MILL

County	AIRS No.	Location	Year	No. of Observations	Concentration (µg/m³) 24-Hour Highest	24-Hour 2nd Highest	24-Hour 3rd Highest	Annual Average
Florida AAQS [a]					**NA**	**150**	**150**	**50**
Palm Beach	12-099-0008	Belle Glade- 38754 State Road 80	2006	30	52	42	41	24
			2005	45	41	38	33	18
			2004	49	31	30	30	17

Note: NA = not available
AAQS = ambient air quality standard.

Source: FDEP, 2004 - 2006 (Quick Look Report, Air Quality Subsystem)

[a] On October 17, 2006, EPA promulgated revised AAQS for particulate matter. The form of the 24-hour PM_{10} standard was changed; compliance is achieved when the expected number of exceedances is less than or equal to 1 over a 3-year average. Florida DEP has not yet adopted the revised standards.

TABLE 3-8
SUMMARY OF CONTINUOUS AMBIENT CARBON MONOXIDE DATA

City	Site ID No.	Location	Year	Number of Observations	Percent of Data Recovery	2nd Highest 8-Hour Concentration		2nd Highest 1-Hour Concentration	
						ppm	$\mu g/m^3$	ppm	$\mu g/m^3$
Palm Beach	12-099-1004	3700 Belvedere Road	2006	4,308	98	1.7	1,955	2.8	3,220
			2005	8,015	91	2.2	2,530	3.4	3,910
			2004	6,060	69	1.8	2,070	3.0	3,450
	12-099-1008	1930 Military Trail	2006	2,778	63	1.2	1,380	2.9	3,335
			2005	6,871	78	1.5	1,725	2.9	3,335
			2004	6,438	73	2.1	2,415	3.7	4,255

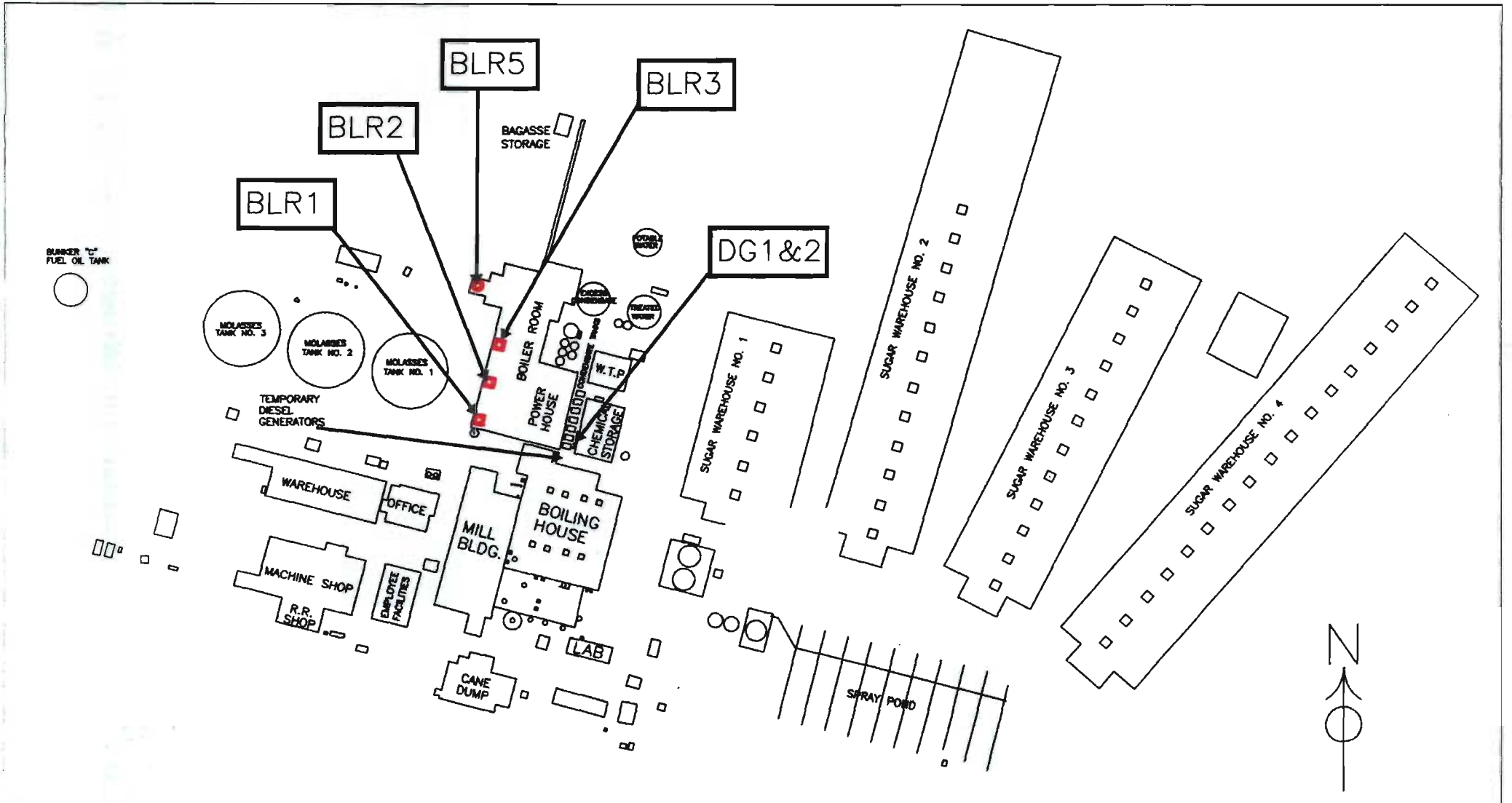
Note: $\mu g/m^3$ = micrograms per cubic meter
ppm = parts per million
1 ppm CO = 1,150 $\mu g/m^3$
Source: FDEP Quick Look Report; 2004 - 2006.

TABLE 3-9
SUMMARY OF CONTINUOUS AMBIENT NITROGEN DIOXIDE DATA COLLECTED NEAR THE U.S. SUGAR MILLS

City	Site ID No.	Location	Year	Number of Observations	Percent of Data Recovery	Annual Average Concentration	
						ppm	$\mu g/m^3$
Palm Beach	12-099-1004	3700 Belvedere Road	2006	4,271	98	0.0100	19
			2005	7,989	91	0.0086	16
			2004	5,961	68	0.0098	18

Note: $\mu g/m^3$ = micrograms per cubic meter
ppm = parts per million
1 ppm NO_2 = 1,881 $\mu g/m^3$
Source: FDEP, Quick Look Reports, 2004-2006
(based on EPA's Air Quality Subsystem)

BEST AVAILABLE COPY

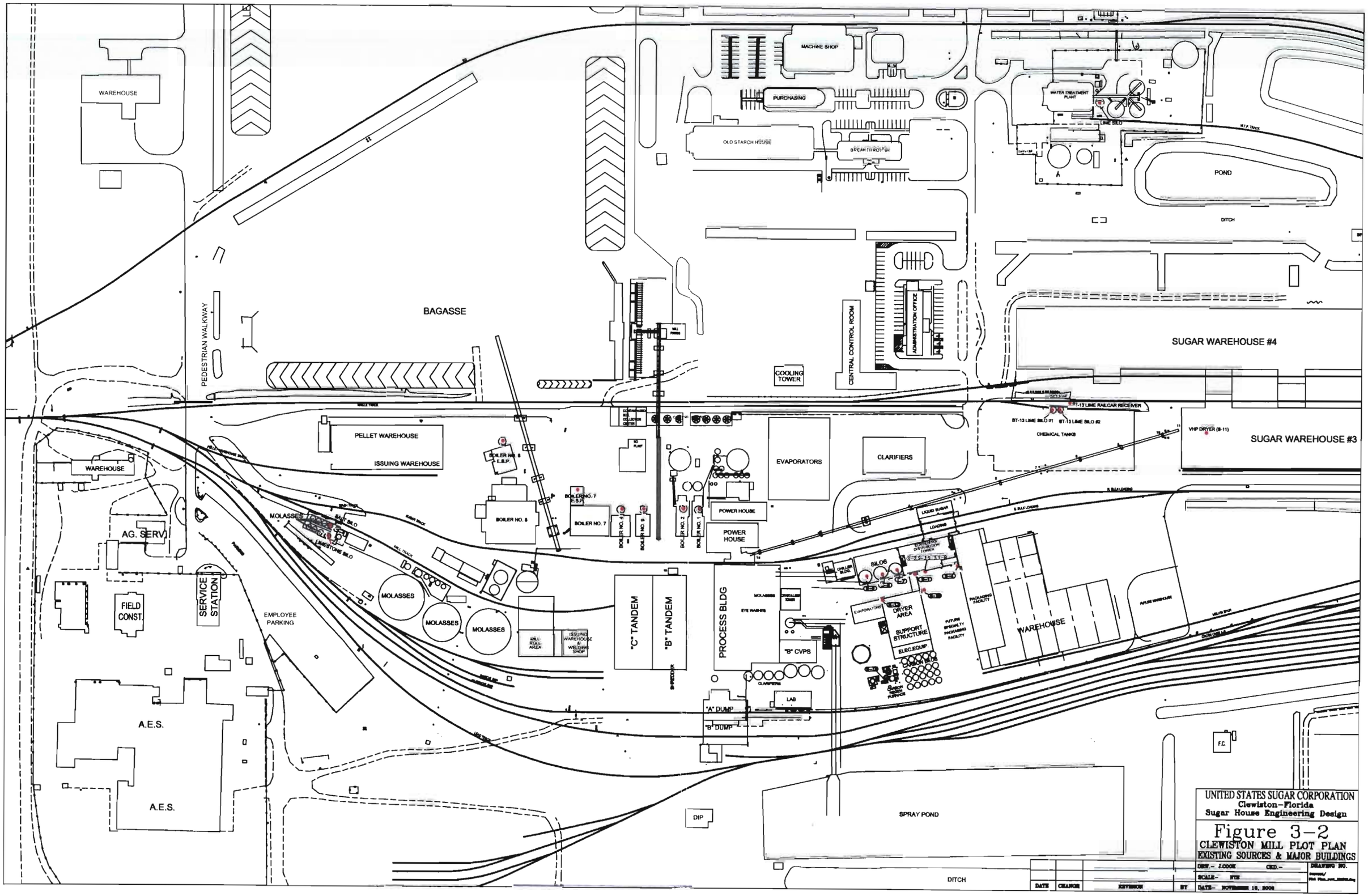


Note: Drawing not to scale

Figure 3–1: Bryant Facility Plot Plan

United States Sugar Corporation Bryant, Florida	Emission Unit Identification	0437584/4.2/Mod. Prot./Fig 3–1

Golder Associates

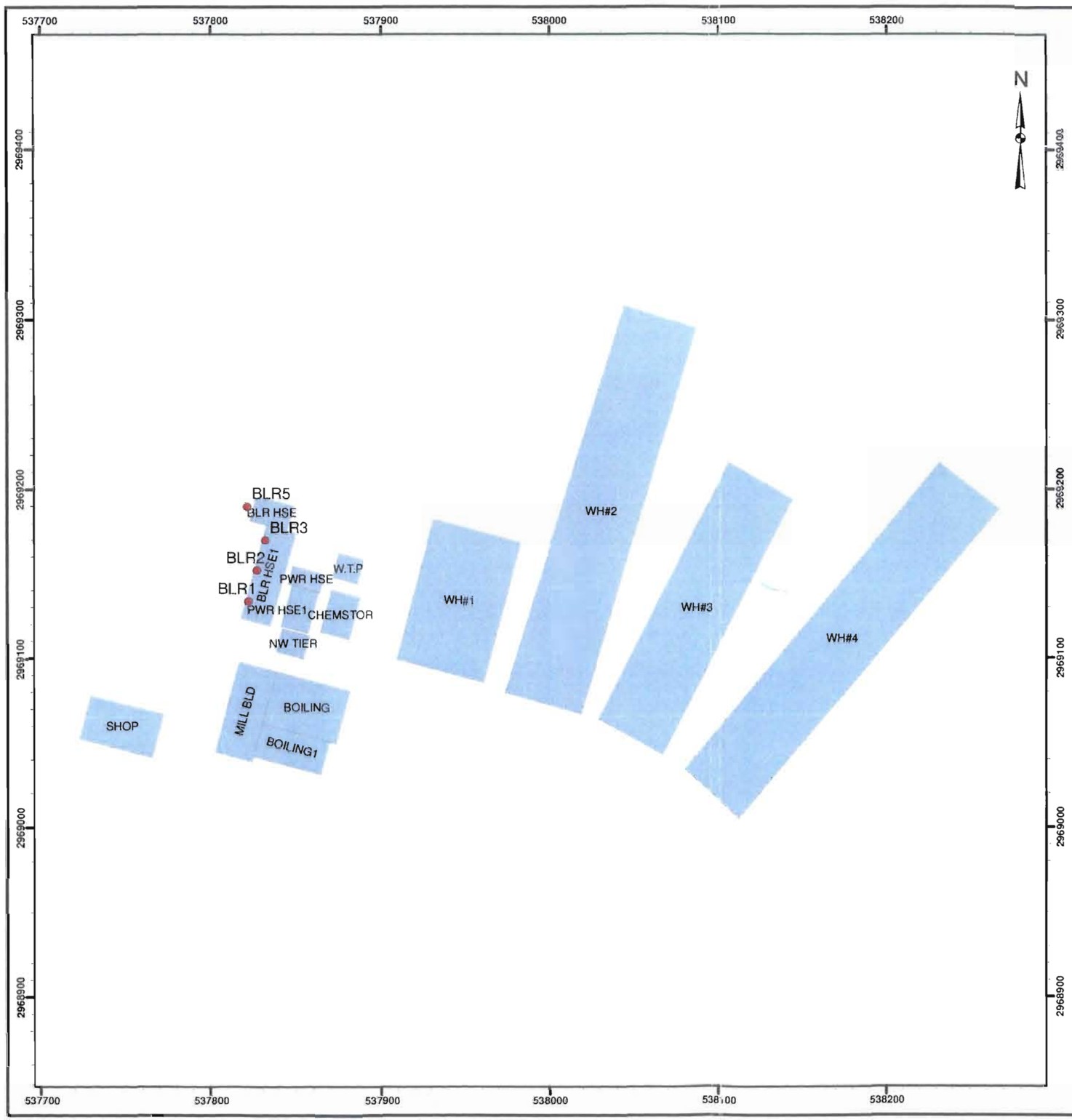


UNITED STATES SUGAR CORPORATION
Clewiston–Florida
Sugar House Engineering Design

Figure 3–2
CLEWISTON MILL PLOT PLAN
EXISTING SOURCES & MAJOR BUILDINGS

DES.– J.COOK	CKD.–	DRAWING NO.
SCALE– 1"=50'		
DATE– NOVEMBER 10, 2008		

DATE	CHANGE	REVISION	BY



N

LEGEND

- Source Locations
- Buildings Used in Downwash
- Property Boundary

PROPERTY BOUNDARY

REFERENCE

Projection: Transverse Mercator Datum: NAD 27 Coordinate System: UTM Zone 17

50 0 50 Meters

PROJECT

U.S. Sugar - Bryant Mill

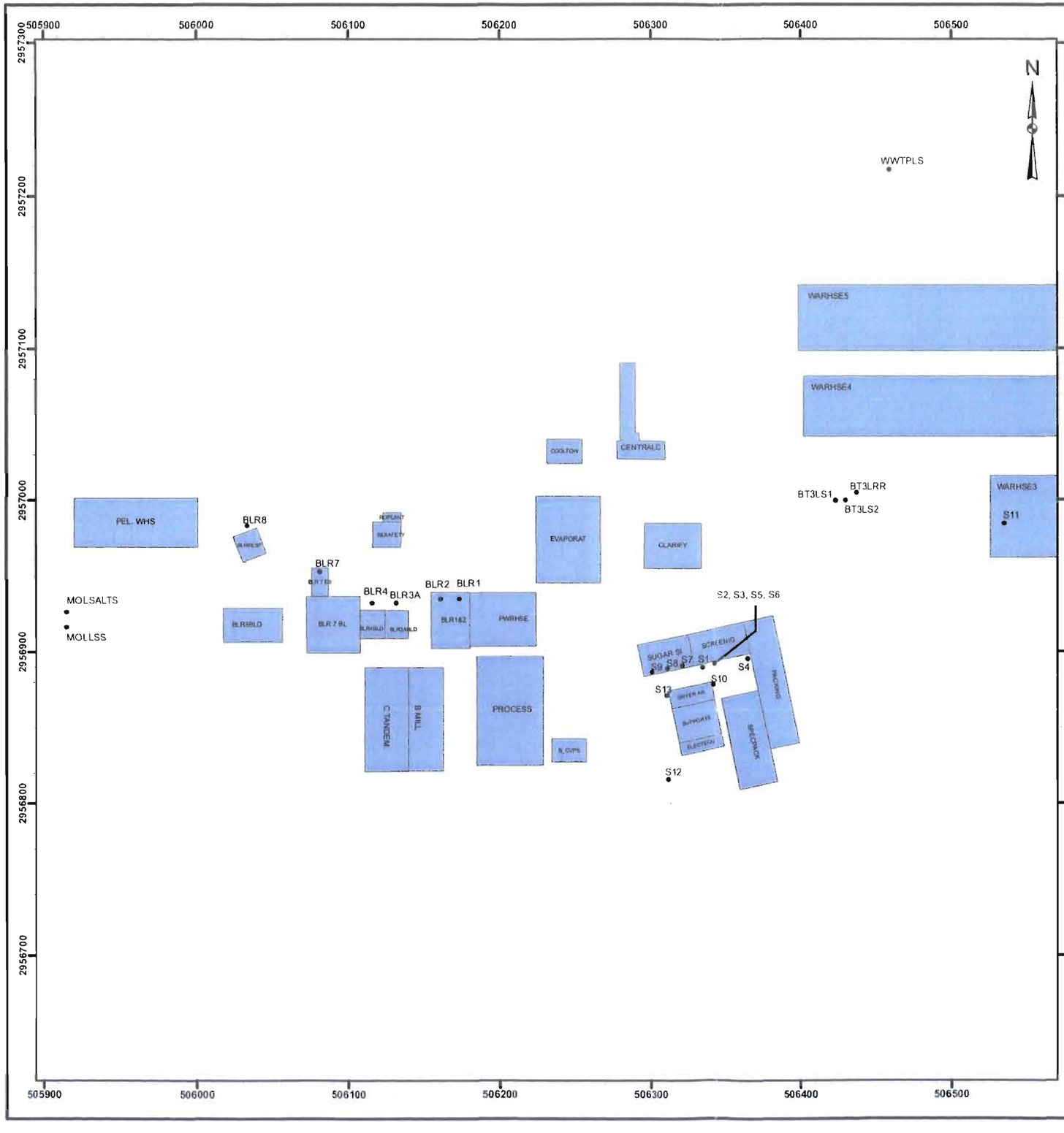
TITLE

Source and Building Layout

Golder Associates Gainesville, Florida

			PROJECT No.	SCALE AS SHOWN	REV. 0
DESIGN	AB	22 Nov. 2006			
GIS	AB	22 Nov. 2006			
CHECK	CB	22 Nov. 2006			
REVIEW	DB	22 Nov. 2006			

FIGURE 3-3



PROJECT

U.S. Sugar Clewiston Mill

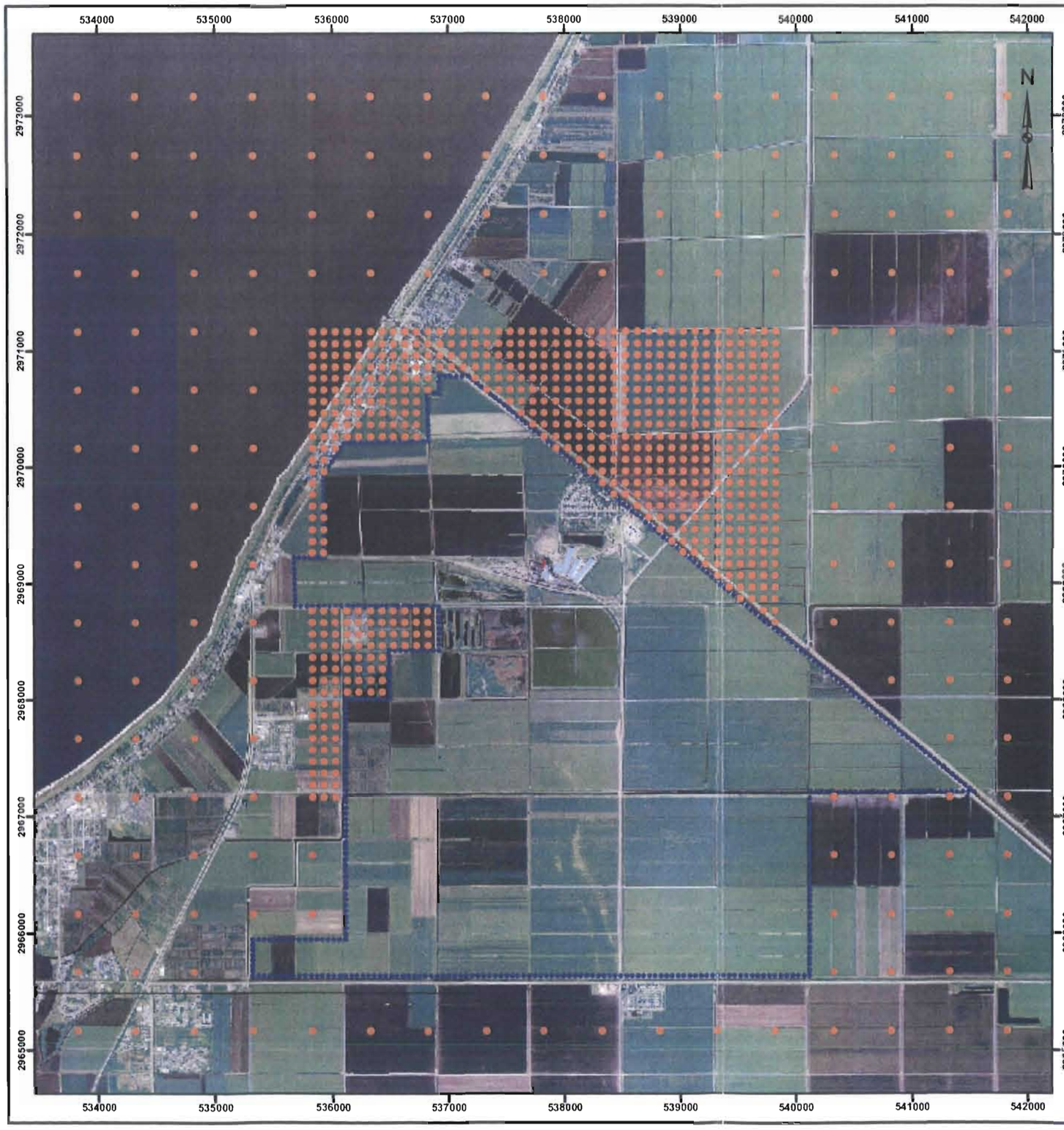
TITLE

Source and Building Locations

Golder Associates
Gainesville, Florida

PROJECT No.			SCALE AS SHOWN	REV. 0
DESIGN	AB	12 Sept. 2006		
GIS	AB	12 Sept. 2006		
CHECK	CB	12 Sept. 2006		
REVIEW	DB	12 Sept. 2006		

FIGURE 3-4



LEGEND

Property Boundary
- 50m Spacing

Receptor Grid:
- 100m Spacing

Receptor Grid:
- 500m Spacing

REFERENCE

Projection: Transverse Mercator Datum: NAD 27 Coordinate System: UTM Zone 17

1,000 0 1,000
Meters

PROJECT

U.S. Sugar - Bryant Mill

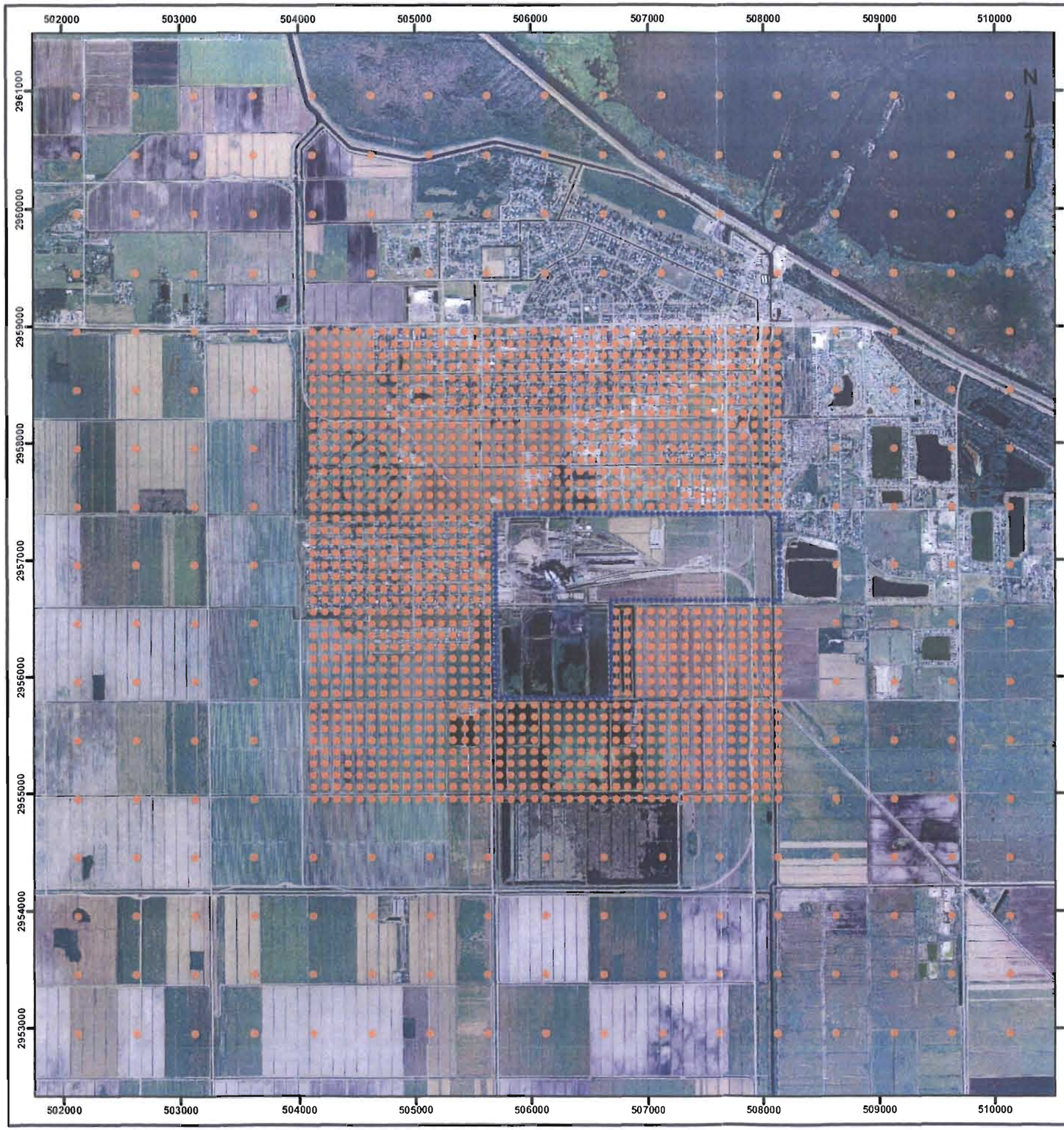
TITLE

Receptor Grid Locations Overlaid on an Aerial Photograph

Golder Associates
Gainesville, Florida

PROJECT No.			SCALE AS SHOWN	REV. 0
DESIGN	AB	22 Nov. 2006		
GIS	AB	22 Nov. 2006		
CHECK	DB	22 Nov. 2006		
REVIEW	DB	22 Nov. 2006		

FIGURE 3-5



LEGEND

Property Boundary
- 50m Spacing

Receptor Grid:
- 100m Spacing

Receptor Grid:
- 500m Spacing

REFERENCE

Projection: Transverse Mercator Datum: NAD 27 Coordinate System: UTM Zone 17

1,100 0 1,100 Meters

PROJECT

U.S. Sugar Clewiston Mill

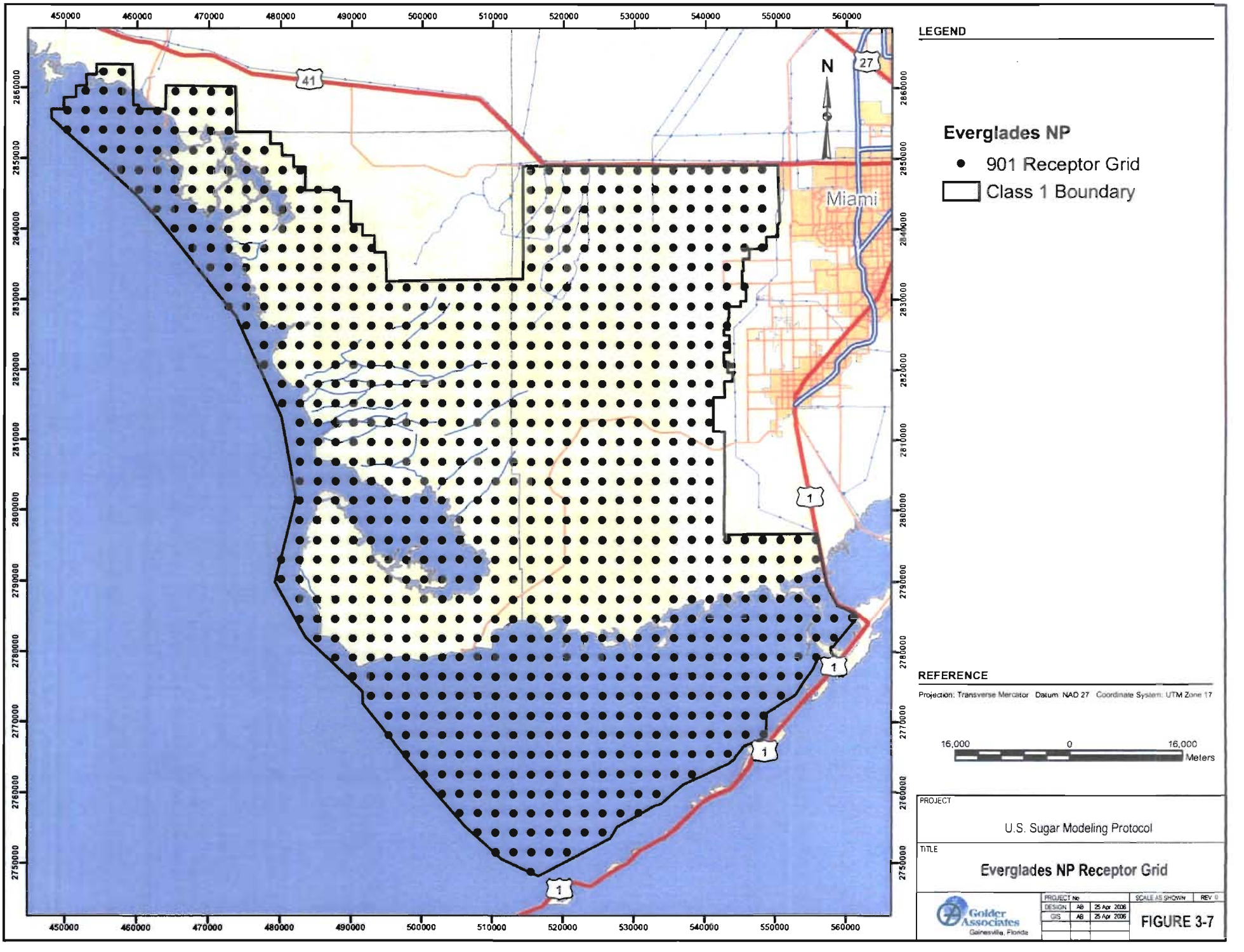
TITLE

Receptor Grid Locations Overlaid on an Aerial Photograph

Golder Associates Gainesville, Florida

PROJECT No.			SCALE AS SHOWN	REV. 0
DESIGN	AB	12 Sept. 2006		
GIS	AB	12 Sept. 2006		
CHECK	CB	12 Sept. 2006		
REVIEW	DB	12 Sept. 2006		

FIGURE 3-6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2820000
2810000
2800000
2790000
2780000
2770000
2760000
2750000
41
27
1
N
Miami
LEGEND
Everglades NP
901 Receptor Grid
Class 1 Boundary
REFERENCE
Projection: Transverse Mercator Datum: NAD 27 Coordinate System: UTM Zone 17
16,000
0
16,000
Meters
PROJECT
U.S. Sugar Modeling Protocol
TITLE
Everglades NP Receptor Grid
Golder Associates
Gainesville, Florida
PROJECT No.
SCALE AS SHOWN
REV. 0
DESIGN AB 25 Apr 2006
GIS AB 25 Apr 2006
FIGURE 3-7

APPENDIX A

Table A-1
U.S. Sugar Bryant Mill Maximum Fuel Oil Burning And SO_2 Emissions - Existing Potential:
Boilers 1-3 @ 0.7% sulfur fuel oil
Boiler 5 @ 0.7% sulfur fuel oil

Boiler	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rates Used For Modeling Purposes: Fuel Oil gal/hr	Fuel Oil MMBtu/hr	Bagasse MMBtu/hr	Modeled SO_2 Emissions: Fuel Oil[a] (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
				MAXIMUM 3-HOUR CASE						
				100% LOAD						
1	194,600	385	189	1,295	189.0	196.0	139.5	11.8	151.3	19.06
2	194,600	385	189	1,295	189.0	196.0	139.5	11.8	151.3	19.06
3	194,600	385	189	1,295	189.0	196.0	139.5	11.8	151.3	19.06
5	342,384	671	215.6	1,477	215.6	455.4	159.2	27.3	186.5	23.50
Totals	926,184	1,826		5,360	782.6	1,043.4	577.8	62.6	640.4	80.7
			(Boilers 1-5:	16,081	gal/3-hrs)					
			(Boilers 1-3:	11,651	gal/3-hrs)					
				75% LOAD						
1	145,950	288.8	189.0	971	141.8	147.0	104.7	8.8	113.5	14.30
2	145,950	288.8	189.0	971	141.8	147.0	104.7	8.8	113.5	14.30
3	145,950	288.8	189.0	971	141.8	147.0	104.7	8.8	113.5	14.30
5	256,788	503.3	215.6	1,108	161.7	341.6	119.4	20.5	139.9	17.63
Totals	694,638	1,370		4,020	587.0	782.6	433.4	47.0	480.3	60.5
			(Boilers 1-5:	12,061	gal/3-hrs)					
			(Boilers 1-3:	8,738	gal/3-hrs)					
				MAXIMUM 24-HOUR AND ANNUAL CASE						
				100% LOAD						
1	194,600	385	189	1,111	162.2	222.8	119.8	13.4	133.1	16.78
2	194,600	385	189	1,111	162.2	222.8	119.8	13.4	133.1	16.78
3	194,600	385	189	1,111	162.2	222.8	119.8	13.4	133.1	16.78
5	297,482	583	215.6	1,477	215.6	367.4	159.2	22.0	181.2	22.84
Totals	881,282	1,738		4,810	702.3	1,035.7	518.5	62.1	580.7	73.2
			(Boilers 1-5:	115,441	gal/24-hrs)					
			(Boilers 1-3:	80,000	gal/24-hrs)					
				75% LOAD						
1	145,950	288.8	189	833	121.7	167.1	89.8	10.0	99.9	12.58
2	145,950	288.8	189	833	121.7	167.1	89.8	10.0	99.9	12.58
3	145,950	288.8	189	833	121.7	167.1	89.8	10.0	99.9	12.58
5	223,112	437.3	215.6	1,108	161.7	275.6	119.4	16.5	135.9	17.13
Totals	660,962	1,304		3,608	526.7	776.8	388.9	46.6	435.5	54.9
			(Boilers 1-5:	86,581	gal/24-hrs)					
			(Boilers 1-3:	60,000	gal/24-hrs)					

[a] Based on stochiometric calculation for SO_2 emissions:

Fuel oil : 0.7% sulfur
18,961 Btu/lb; 146,000 Btu/gal
7.7 lb/gal

[b] Based on SO_2 from bagasse of 0.06 lb/MMBtu.

Table A-2
U.S. Sugar Bryant Mill Maximum PM_{10} Emissions - Existing Potential

Boiler	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rates Used For Modeling Purposes[a] Fuel Oil gal/hr	Fuel Oil MMBtu/hr	Bagasse MMBtu/hr	PM10 Emissions Factor[b] (lb/MMBtu)	Bagasse (lb/hr)	Total (lb/hr)	Total (g/s)
MAXIMUM 24-HOUR AND ANNUAL CASE										
100% LOAD										
1	194,600	385	189	0	0	385.0	0.30	115.5	115.5	14.55
2	194,600	385	189	0	0	385.0	0.30	115.5	115.5	14.55
3	194,600	385	189	0	0	385.0	0.30	115.5	115.5	14.55
5	297,482	583	215.6	0	0	583.0	0.15	87.5	87.5	11.02
Totals	881,282	1,738		0	0	1,738.0		434.0	434.0	54.68
75% LOAD										
1	145,950	288.8	189	0	0	288.8	0.30	86.6	86.6	10.91
2	145,950	288.8	189	0	0	288.8	0.30	86.6	86.6	10.91
3	145,950	288.8	189	0	0	288.8	0.30	86.6	86.6	10.91
5	223,112	437.3	215.6	0	0	437.3	0.15	65.6	65.6	8.26
Totals	660,962	1,303.5		0	0	1,303.5		325.5	325.5	41.01

[a] Assumes 55% combustion efficiency for both bagasse and fuel oil.

[b] Based on allowable limit in permit.

Table A-3
U.S. Sugar Bryant Mill Maximum CO Emissions - Existing Potential

Boiler	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rates Used For Modeling Purposes: Fuel Oil gal/hr	Fuel Oil MMBtu/hr	Bagasse MMBtu/hr	CO Emissions: Fuel Oil (lb/hr)	Bagasse[a] (lb/hr)	Total (lb/hr)	Total (g/s)
MAXIMUM 1-HOUR AND 8-HOUR CASE										
100% LOAD										
1	194,600	385	189	0	0	385.0	0.0	2,502.5	2,502.5	315.32
2	194,600	385	189	0	0	385.0	0.0	2,502.5	2,502.5	315.32
3	194,600	385	189	0	0	385.0	0.0	2,502.5	2502.5	315.32
5	342,384	671	215.6	0	0	671.0	0.0	4,361.5	4361.5	549.55
Totals	926,184	1,826		0	0	1,826.0	0.0	11,869.0	11,869.0	1,495.5
75% LOAD										
1	145,950	288.8	189	0	0	288.8	0.0	1,876.9	1,876.9	236.49
2	145,950	288.8	189	0	0	288.8	0.0	1,876.9	1,876.9	236.49
3	145,950	288.8	189	0	0	288.8	0.0	1,876.9	1876.9	236.49
5	256,788	503.3	215.6	0	0	503.3	0.0	3,271.1	3271.1	412.16
Totals	694,638	1,370		0	0	1,369.5	0.0	8,901.8	8,901.8	1,121.6

[a] Based on available stack test data:
Boiler No. 1 - 6.5 lb/MMBtu
Boiler No. 2 - 6.5 lb/MMBtu
Boiler No. 3 - 6.5 lb/MMBtu
Boiler No. 5 - 6.5 lb/MMBtu

Table A-4
U.S. Sugar Bryant Mill Maximum Fuel Oil Burning And NO_x Emissions - Existing Potential

Boiler		Total Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rates Used For Modeling Purposes			NO_x Emissions			
				Fuel Oil		Bagasse	Fuel Oil[a]	Bagasse[b]	Total	
				gal/hr	MMBtu/hr	MMBtu/hr	(lb/hr)	(lb/hr)	(lb/hr)	(g/s)
				MAXIMUM 24-HOUR AND ANNUAL CASE						
				75% LOAD						
1	145,950	288.8	189	833	121.7	167.1	38.9	51.8	90.7	11.43
2	145,950	288.8	189	833	121.7	167.1	38.9	33.4	72.4	9.12
3	145,950	288.8	189	833	121.7	167.1	38.9	35.1	74.0	9.33
5	223,112	437.3	215.6	1,108	161.7	275.6	51.7	46.8	98.6	12.42
Totals	660,962	1,304		3,608	526.7	776.8	168.5	167.1	335.7	42.3
			(Boilers 1-5:	86,582	gal/24-hrs)					
			(Boilers 1-3:	60,001	gal/24-hrs)					

[a] Based on AP-42 for No. 6 fuel oil combustion: 47 lb/1000 gal

Fuel oil : 146,000 Btu/gal

47 lb/1000 gal / 146,000 Btu/gal = 0.32 lb/MMBtu

[b] Based on highest stack test during last 5 years.:

Boiler No. 1 - 0.31 lb/MMBtu

Boiler No. 2 - 0.20 lb/MMBtu

Boiler No. 3 - 0.21 lb/MMBtu

Boiler No. 5 - 0.17 lb/MMBtu

TABLE A-5
SO_2 EMISSIONS - EXISTING CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
3-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rate For Modeling Purposes: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
				100% LOAD						
1	245,000	495.6	130	0	0	495.6	0.0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0.0	26.8	26.8	3.38
4	300,000	633.0	326	0	0	633.0	0.0	38.0	38.0	4.79
7	385,000	812.0	326	0	0	812.0	0.0	138.0	138.0	17.39
8	633,000	1,185.0	562	0	0	1,185.0	0.0	71.1	71.1	8.96
Totals	1,778,000	3,572.6	1,474	0	0	3,572.6	0.0	303.7	303.7	38.3
				75% LOAD						
1	183,750	371.7	130	0	0	371.7	0.0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0.0	20.1	20.1	2.53
4	225,000	474.8	326	0	0	474.8	0.0	28.5	28.5	3.59
7	288,750	609.0	326	0	0	609.0	0.0	103.5	103.5	13.04
8	474,750	888.8	562	0	0	888.8	0.0	53.3	53.3	6.72
Totals	1,333,500	2,679.5	1,474	0	0	2,679.5	0.0	227.8	227.8	28.7

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-6
SO_2 EMISSIONS - EXISTING CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Modeling Purposes			SO_2 Emissions			
				Fuel Oil		Bagasse	Fuel Oil	Bagasse[b]	Total	
				gal/hr[a]	MMBtu/hr	(MMBtu/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(g/s)
					100% Load					
1	245,000	495.6	130	0	0	495.6	0.0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0.0	26.8	26.8	3.38
4	285,000	600.0	326	0	0	600.0	0.0	36.0	36.0	4.54
7	350,000	738.0	326	0	0	738.0	0.0	125.5	125.5	15.81
8	575,000	1,077.0	562	0	0	1077.0	0.0	64.6	64.6	8.14
Totals	1,670,000	3,357.6	1,474	0	0	3,357.6	0.0	282.6	282.6	35.6
					75% Load					
1	183,750	371.7	130	0	0	371.7	0.0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0.0	20.1	20.1	2.53
4	213,750	450.0	326	0	0	450.0	0.0	27.0	27.0	3.40
7	262,500	553.5	326	0	0	553.5	0.0	94.1	94.1	11.86
8	431,250	807.8	562	0	0	807.8	0.0	48.5	48.5	6.11
Totals	1,252,500	2,518.2	1,474	0	0	2,518.2	0.0	212.0	212.0	26.7

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-7
PM_{10} EMISSIONS - EXISTING CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Modeling Purposes: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	PM10 Emission Factor[b] (lb/MMBtu)	PM_{10} Emissions: Fuel Oil (lb/hr)	Bagasse (lb/hr)	Total (lb/hr)	Total (g/s)
					100% Load						
1	245,000	495.6	130	0	0	495.6	0.25	0.0	123.9	123.9	15.61
2	215,000	447.0	130	0	0	447.0	0.25	0.0	111.8	111.8	14.08
4	285,000	600.0	326	0	0	600.0	0.15	0.0	90.0	90.0	11.34
7	350,000	738.0	326	0	0	738.0	0.03	0.0	22.1	22.1	2.79
8	575,000	1,077.0	562	0	0	1,077.0	0.025	0.0	26.9	26.9	3.39
Totals	1,670,000	3,357.6	1,474	0	0	3,357.6		0.0	374.7	374.7	47.2
					75% Load						
1	183,750	371.7	130	0	0	371.7	0.25	0.0	92.9	92.9	11.71
2	161,250	335.25	130	0	0	335.3	0.25	0.0	83.8	83.8	10.56
4	213,750	450	326	0	0	450.0	0.15	0.0	67.5	67.5	8.51
7	262,500	553.5	326	0	0	553.5	0.03	0.0	16.6	16.6	2.09
8	431,250	807.75	562	0	0	807.8	0.025	0.0	20.2	20.2	2.54
Totals	1,252,500	2,518.2	1,474	0	0	2,518.2		0.0	281.0	281.0	35.4

[a] Based on maximum capacity of fuel oil burners.

[b] Based on permit limit. PM_{10} assumed to equal PM emissions.

TABLE A-8
CO EMISSIONS - EXISTING CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
1-HR AND 8-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rates For Modeling Purposes: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	CO Emission Factor[b] (lb/MMBtu)	CO Emissions: Fuel Oil (lb/hr)	Bagasse (lb/hr)	Total (lb/hr)	Total (g/s)
					100% LOAD						
1	245,000	495.6	130	0	0	495.6	11.0	0.0	5,451.6	5,451.6	686.90
2	215,000	447.0	130	0	0	447.0	14.0	0.0	6,258.0	6,258.0	788.51
4	300,000	633.0	326	0	0	633.0	11.0	0.0	6,963.0	6963.0	877.34
7	385,000	812.0	326	0	0	812.0	1.1	0.0	893.2	893.2	112.54
8	633,000	1,185.0	562	0	0	1,185.0	3.0	0.0	3,555.0	3555.0	447.93
Totals	1,778,000	3,572.6	1,474	0	0	3,572.6		0.0	23,120.8	23,120.8	2,913.2
					75% LOAD						
1	183,750	371.7	130	0	0	371.7	11.0	0.0	4,088.7	4,088.7	515.18
2	161,250	335.3	130	0	0	335.3	14.0	0.0	4,693.5	4,693.5	591.38
4	225,000	474.8	326	0	0	474.8	11.0	0.0	5,222.3	5222.3	658.00
7	288,750	609.0	326	0	0	609.0	1.1	0.0	669.9	669.9	84.41
8	474,750	888.8	562	0	0	888.8	3.0	0.0	2,666.3	2666.3	335.95
Totals	1,333,500	2,679.5	1,474	0	0	2,679.5		0.0	17,340.6	17,340.6	2,184.9

[a] Based on maximum capacity of fuel oil burners.

[b] Based on available test data for each boiler.

TABLE A-9
NO_x EMISSIONS - EXISTING CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate	Heat Input	Maximum Heat Input From Fuel Oil[a]	Rates For Modeling Purposes			NO_x Emission Factor[b]		NO_x Emissions			
				Fuel Oil		Bagasse	Fuel Oil	Bagasse	Fuel Oil	Bagasse	Total	
	(lb/hr)	(MMBtu/hr)	(MMBtu/hr)	gal/hr[a]	MMBtu/hr	(MMBtu/hr)	(lb/MMBtu)	(lb/MMBtu)	(lb/hr)	(lb/hr)	(lb/hr)	(g/s)
					100% Load							
1	245,000	495.6	130	963	130	365.6	0.17	0.10	22.1	36.6	58.7	7.39
2	215,000	447.0	130	963	130	317.0	0.17	0.10	22.1	31.7	53.8	6.78
4	285,000	600.0	326	2,415	326	274.0	0.17	0.20	55.4	54.8	110.2	13.89
7	350,000	738.0	326	0	0	738.0	0.20	0.212	0.0	156.5	156.5	19.71
8	575,000	1,077.0	562	0	0	1,077.0	0.14	0.14	0.0	150.8	150.8	19.00
Totals	1,670,000	3,357.6	1,474	4,341	586	2,771.6			99.6	430.3	529.9	66.8
					75% Load							
1	183,750	371.7	130	963	130	241.7	0.17	0.10	22.1	24.2	46.3	5.83
2	161,250	335.3	130	963	130	205.3	0.17	0.10	22.1	20.5	42.6	5.37
4	213,750	450.0	326	2,415	326	124.0	0.17	0.20	55.4	24.8	80.2	10.11
7	262,500	553.5	326	0	0	553.5	0.20	0.212	0.0	117.3	117.3	14.79
8	431,250	807.8	562	0	0	807.8	0.14	0.14	0.0	113.1	113.1	14.25
Totals	1,252,500	2,518.2	1,474	4,341	586	1,932.2			99.6	299.9	399.5	50.3

[a] Based on maximum capacity of fuel oil burners.

[b] For bagasse burning: Boiler Nos. 1 and 2 based on average of available test data; for Boiler Nos. 4, 7, and 8, based on permitted limit.

TABLE A-10
Existing and Future Emissions of PM_{10} From the Sugar Refinery and Sugar Mill, U.S. Sugar Corp., Clewiston

Source/Vent Name	EU No.	Source ID	Exhaust Grain Loading (gr/dscf)	Exhaust Gas Flow (dscfm)	Hours of Operation	PM_{10} Emissions (lb/hr)[a]	(g/s)	(TPY)
V.H.P. Sugar Dryer	015	S-11	0.001723	110,042	8,760	1.63	0.2048	7.12
White Sugar Dryer No. 1	016	S-10	0.00177	94,488	8,760	1.43	0.1806	6.28
White Sugar Dryer No. 2	029	S-13	0.0051	96,000	8,760	4.20	0.5288	18.38
					TOTAL =	7.26	0.9142	31.78
Vacuum Systems								
Screening and Distribution Vacuum	018	S-1	0.00754	990	8,760	0.06	0.0081	0.28
100 lb Bagging Vacuum System	018	S-2	0.00856	872	8,760	0.06	0.0081	0.28
5 lb Bagging Vacuum System	018	S-3	0.00759	984	8,760	0.06	0.0081	0.28
					TOTAL =	0.19	0.0242	0.84
Conditioning Silos								
Conditioning Silo No. 2	019	S-7	0.0025	2,641	8,760	0.06	0.0071	0.25
Conditioning Silo No. 4	019	S-8	0.0025	2,641	8,760	0.06	0.0071	0.25
Conditioning Silo No. 6	019	S-9	0.0025	2,641	8,760	0.06	0.0071	0.25
					TOTAL =	0.17	0.0214	0.74
Screening and Distribution								
Screening and Distribution #1	020	S-5	0.0025	2,668	8,760	0.06	0.0072	0.25
Screening and Distribution #2	020	S-6	0.0025	8,775	8,760	0.19	0.0237	0.82
					TOTAL =	0.25	0.0309	1.07
Sugar Packaging Baghouse								
Packaging Dust Collector	022	S-4	0.0025	9,589	8,760	0.21	0.0259	0.90
Granular Carbon Furnace	017	--	--	--	8,760	0.63	0.0794	2.76
		GRAND TOTAL =				**8.70**		**38.10**
BT-13 Lime Silo #1	031		0.02	465	8,760	0.080	0.0100	0.35
BT-13 Lime Silo #2	031		0.02	465	8,760	0.080	0.0100	0.35
BT-13 Lime Railcar Receiver	031		0.02	465	8,760	0.080	0.0100	0.35
Molasses Plant Salt Silo			0.02	750	8,760	0.129	0.0162	0.56
Molasses Plant Limestone Silo	030		0.02	733	8,760	0.126	0.0158	0.55
Water Treatment Lime Silo	010		0.02	750	8,760	0.129	0.0162	0.56

[a] Based on permitted emission limits.

Note: lb/hr = pounds per hour
TPY = tons per year

TABLE A-11
Existing and Future Emissions From the Granular Carbon Furnace at U. S. Sugar Corporation, Clewiston

Regulated Pollutant	Maximum Hourly (lb/hr)	Basis	Maximum Annual (TPY)[a]
Particulate Matter (PM)	0.7	Permit Limit	3.07
Particulate Matter (PM_{10})	0.63	90% of PM	2.76
Sulfur Dioxide (SO_2)	0.64	Footnote b	2.80
Nitrogen Oxides (NO_x)	3.0	Footnote c	13.14
Carbon Monoxide (CO)	3.0	Footnote c	13.14
VOC	1.0	Permit Limit	4.38

[a] Based on 8,760 hours of operation.

[b] Average hourly rate. Based on stoichmetric calculation for converting sulfur into sulfur dioxide: 90 gal/hr x 0.05% x 7.1 lb/gal x 2 lb SO_2/lb sulfur = 0.64 lb/hr.

[c] Estimated emissions obtained from design information provided by BSP Thermal Systems, Inc.

TABLE A-12
SO_2 EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
3-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load										
Scenario A										
1	245,000	495.6	130	0	0	495.6	0.0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0.0	26.8	26.8	3.38
4	300,000	633.0	326	0	0	633.0	0.0	38.0	38.0	4.79
7	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
Totals	760,000	1,575.6	1,474	0	0	1,575.6	0.0	94.5	94.5	11.9
Scenario B										
1	0	0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	385,000	812.0	326	0	0	812.0	0.0	138.0	138.0	17.39
8	633,000	1,185.0	562	0	0	1,185.0	0.0	71.1	71.1	8.96
Totals	1,018,000	1,997.0	1,474	0	0	1,997.0	0.0	209.1	209.1	26.4
75% Load										
Scenario A										
1	183,750	371.7	130	0	0	371.7	0.0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0.0	20.1	20.1	2.53
4	225,000	474.8	326	0	0	474.8	0.0	28.5	28.5	3.59
7	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
Totals	570,000	1,181.7	1,474	0	0	1,181.7	0.0	70.9	70.9	8.9
Scenario B										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	288,750	609.0	326	0	0	609.0	0.0	103.5	103.5	13.04
8	474,750	888.8	562	0	0	888.8	0.0	53.3	53.3	6.72
Totals	763,500	1,497.8	1,474	0	0	1,497.8	0.0	156.9	156.9	19.8
50% Load										
Scenario A										
1	122,500	247.8	130	0	0	247.8	0.0	14.9	14.9	1.87
2	107,500	223.5	130	0	0	223.5	0.0	13.4	13.4	1.69
4	150,000	316.5	326	0	0	316.5	0.0	19.0	19.0	2.39
7	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.0	0.0	0.0	0.00
Totals	380,000	787.8	1,474	0	0	787.8	0.0	47.3	47.3	6.0
Scenario B										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	192,500	406.0	326	0	0	406.0	0.0	69.0	69.0	8.70
8	316,500	592.5	562	0	0	592.5	0.0	35.6	35.6	4.48
Totals	509,000	998.5	1,474	0	0	998.5	0.0	104.6	104.6	13.2

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-13
SO_2 EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load										
Scenario A										
1	245,000	495.6	130	0	0	495.6	0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0	26.8	26.8	3.38
4	285,000	600.0	326	0	0	600.0	0	36.0	36.0	4.54
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
Totals	745,000	1,542.6	1,474	0	0	1,542.6	0	92.6	92.6	11.7
Scenario B										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0	0.0	0.0	0.00
7	350,000	738.0	326	0	0	738.0	0	125.5	125.5	15.81
8	575,000	1,077.0	562	0	0	1,077.0	0	64.6	64.6	8.14
Totals	925,000	1,815.0	1,474	0	0	1,815.0	0	190.1	190.1	24.0
75% Load										
Scenario A										
1	183,750	371.7	130	0	0	371.7	0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0	20.1	20.1	2.53
4	213,750	450.0	326	0	0	450.0	0	27.0	27.0	3.40
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
Totals	558,750	1,157.0	1,474	0	0	1,157.0	0	69.4	69.4	8.7
Scenario B										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0	0.0	0.0	0.00
7	262,500	553.5	326	0	0	553.5	0	94.1	94.1	11.86
8	431,250	807.8	562	0	0	807.8	0	48.5	48.5	6.11
Totals	693,750	1,361.3	1,474	0	0	1,361.3	0	142.6	142.6	18.0
50% Load										
Scenario A										
1	122,500	247.8	130	0	0	247.8	0	14.9	14.9	1.87
2	107,500	223.5	130	0	0	223.5	0	13.4	13.4	1.69
4	142,500	300.0	326	0	0	300.0	0	18.0	18.0	2.27
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
Totals	372,500	771.3	1,474	0	0	771.3	0	46.3	46.3	5.8
Scenario B										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0	0.0	0.0	0.00
7	175,000	369.0	326	0	0	369.0	0	62.7	62.7	7.90
8	287,500	538.5	562	0	0	538.5	0	32.3	32.3	4.07
Totals	462,500	907.5	1,474	0	0	907.5	0	95.0	95.0	12.0

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-14
PM_{10} EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	PM10 Emission Factor[b] (lb/MMBtu)	PM_{10} Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load											
Scenario A											
1	245,000	495.6	130	0	0	495.6	0.25	0.0	123.9	123.9	15.61
2	215,000	447.0	130	0	0	447.0	0.25	0.0	111.8	111.8	14.08
4	285,000	600.0	326	0	0	600.0	0.15	0.0	90.0	90.0	11.34
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
Totals	745,000	1,542.6	1,474	0	0	1,542.6		0.0	325.7	325.7	41.0
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	350,000	738.0	326	0	0	738.0	0.03	0.0	22.1	22.1	2.79
8	575,000	1,077.0	562	0	0	1,077.0	0.025	0.0	26.9	26.9	3.39
Totals	925,000	1,815.0	1,474	0	0	1,815.0		0.0	49.1	49.1	6.2
75% Load											
Scenario A											
1	183,750	371.7	130	0	0	371.7	0.25	0.0	92.9	92.9	11.71
2	161,250	335.3	130	0	0	335.3	0.25	0.0	83.8	83.8	10.56
4	213,750	450.0	326	0	0	450.0	0.15	0.0	67.5	67.5	8.51
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
Totals	558,750	1,157.0	1,474	0	0	1,157.0		0.0	244.2	244.2	30.8
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	262,500	553.5	326	0	0	553.5	0.03	0.0	16.6	16.6	2.09
8	431,250	807.8	562	0	0	807.8	0.025	0.0	20.2	20.2	2.54
Totals	693,750	1,361.3	1,474	0	0	1,361.3		0.0	36.8	36.8	4.6
50% Load											
Scenario A											
1	122,500	247.8	130	0	0	247.8	0.25	0.0	62.0	62.0	7.81
2	107,500	223.5	130	0	0	223.5	0.25	0.0	55.9	55.9	7.04
4	142,500	300.0	326	0	0	300.0	0.15	0.0	45.0	45.0	5.67
7	0	0.0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
Totals	372,500	771.3	1,474	0	0	771.3		0.0	162.8	162.8	20.5
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	175,000	369.0	326	0	0	369.0	0.03	0.0	11.1	11.1	1.39
8	287,500	539	562	0	0	538.5	0.025	0.0	13.5	13.5	1.70
Totals	462,500	907.5	1,474	0	0	907.5		0.0	24.5	24.5	3.1

[a] Based on maximum capacity of fuel oil burners.

[b] Based on permit limit. PM_{10} assumed to equal PM emissions.

TABLE A-15
CO EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
1-HR AND 8-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	CO Emission Factor[b] (lb/MMBtu)	CO Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
				100% Load							
Scenario A											
1	245,000	495.6	130	0	0	495.6	11.0	0.0	5,451.6	5,451.6	686.90
2	215,000	447.0	130	0	0	447.0	14.0	0.0	6,258.0	6,258.0	788.51
4	300,000	633.0	326	0	0	633.0	11.0	0.0	6,963.0	6963.0	877.34
7	0	0.0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
Totals	760,000	1,575.6	1,474	0	0	1,575.6		0.0	18,672.6	18,672.6	2,352.7
Scenario B											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	385,000	812.0	326	0	0	812.0	1.1	0.0	893.2	893.2	112.54
8	633,000	1,185.0	562	0	0	1,185.0	3.0	0.0	3,555.0	3555.0	447.93
Totals	1,018,000	1,997.0	1,474	0	0	1,997.0		0.0	4,448.2	4,448.2	560.5
				75% Load							
Scenario A											
1	183,750	371.7	130	0	0	371.7	11.0	0.0	4,088.7	4,088.7	515.18
2	161,250	335.3	130	0	0	335.3	14.0	0.0	4,693.5	4,693.5	591.38
4	225,000	474.8	326	0	0	474.8	11.0	0.0	5,222.3	5222.3	658.00
7	0	0.0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
Totals	570,000	1,181.7	1,474	0	0	1,181.7		0.0	14,004.5	14,004.5	1,764.6
Scenario B											
1	0	0.0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	288,750	609.0	326	0	0	609.0	1.1	0.0	669.9	669.9	84.41
8	474,750	888.8	562	0	0	888.8	3.0	0.0	2,666.3	2666.3	335.95
Totals	763,500	1,497.8	1,474	0	0	1,497.8		0.0	3,336.2	3,336.2	420.4
				50% Load							
Scenario A											
1	122,500	247.8	130	0	0	247.8	11.0	0.0	2,725.8	2,725.8	343.45
2	107,500	223.5	130	0	0	223.5	14.0	0.0	3,129.0	3,129.0	394.25
4	150,000	316.5	326	0	0	316.5	11.0	0.0	3,481.5	3481.5	438.67
7	0	0.0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
Totals	380,000	787.8	1,474	0	0	787.8		0.0	9,336.3	9,336.3	1,176.4
Scenario B											
1	0	0.0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	192,500	406.0	326	0	0	406.0	1.1	0.0	446.6	446.6	56.27
8	316,500	592.5	562	0	0	592.5	3.0	0.0	1,777.5	1777.5	223.97
Totals	509,000	998.5	1,474	0	0	998.5		0.0	2,224.1	2,224.1	280.2

[a] Based on maximum capacity of fuel oil burners.

[b] Based on available test data for each boiler.

TABLE A-16
NO_x EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Rates For Scenario: Fuel Oil MMBtu/hr	Rates For Scenario: Bagasse (MMBtu/hr)	NO_x Emission Factor: Fuel Oil (lb/MMBtu)	NO_x Emission Factor: Bagasse (lb/MMBtu)	NO_x Emissions: Fuel Oil (lb/hr)	NO_x Emissions: Bagasse[b] (lb/hr)	NO_x Emissions: Total (lb/hr)	NO_x Emissions: Total (g/s)
100% Load												
Scenario A												
1	245,000	495.6	130	963	130	365.6	0.17	0.10	22.1	36.6	58.7	7.39
2	215,000	447.0	130	963	130	317.0	0.17	0.10	22.1	31.7	53.8	6.78
4	285,000	600.0	326	0	0	600.0	0.17	0.20	0.0	120.0	120.0	15.12
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
Totals	745,000	1,542.6	1,474	1,926	260	1,282.6			44.2	188.3	232.5	29.3
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	350,000	738.0	326	0	0	738.0	0.20	0.212	0.0	156.5	156.5	19.71
8	575,000	1,077.0	562	0	0	1,077.0	0.14	0.14	0.0	150.8	150.8	19.00
Totals	925,000	1,815.0	1,474	0	0	1,815.0			0.0	307.2	307.2	38.7
75% Load												
Scenario A												
1	183,750	371.7	130	963	130	241.7	0.17	0.10	22.1	24.2	46.3	5.83
2	161,250	335.3	130	963	130	205.3	0.17	0.10	22.1	20.5	42.6	5.37
4	213,750	450.0	326	0	0	450.0	0.17	0.20	0.0	90.0	90.0	11.34
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
Totals	558,750	1,157.0	1,474	1,926	260	897.0			44.2	134.7	178.9	22.5
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	262,500	553.5	326	0	0	553.5	0.20	0.212	0.0	117.3	117.3	14.79
8	431,250	807.8	562	0	0	807.8	0.14	0.14	0.0	113.1	113.1	14.25
Totals	693,750	1,361.3	1,474	0	0	1,361.3			0.0	230.4	230.4	29.0
50% Load												
Scenario A												
1	122,500	247.8	130	963	130	117.8	0.17	0.10	22.1	11.8	33.9	4.27
2	107,500	223.5	130	963	130	93.5	0.17	0.10	22.1	9.4	31.5	3.96
4	142,500	300.0	326	0	0	300.0	0.17	0.20	0.0	60.0	60.0	7.56
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
Totals	372,500	771.3	1,474	1,926	260	511.3			44.2	81.1	125.3	15.8
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	175,000	369.0	326	0	0	369.0	0.20	0.212	0.0	78.2	78.2	9.86
8	287,500	538.5	562	0	0	538.5	0.14	0.14	0.0	75.4	75.4	9.50
Totals	462,500	907.5	1,474	0	0	907.5			0.0	153.6	153.6	19.4

[a] Based on maximum capacity of fuel oil burners.

[b] For bagasse burning: Boiler Nos. 1 and 2 based on average of available test data; for Boiler Nos. 4, 7, and 8, based on permitted limit.
For fuel oil burning: Boiler Nos. 1, 2 and 4 based on burner design, confirmed by testing; for Boiler Nos. 7 and 8, based on permitted limit.

TABLE A-17
SO_2 EMISSIONS - FUTURE CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
3-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil (MMBtu/hr)	Rate For Scenario: Fuel Oil gal/hr[a]	Rate For Scenario: Fuel Oil MMBtu/hr	Rate For Scenario: Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	SO_2 Emissions: Bagasse[b] (lb/hr)	SO_2 Emissions: Total (lb/hr)	SO_2 Emissions: Total (g/s)
				100% LOAD						
1	245,000	495.6	130	0	0	495.6	0.0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0.0	26.8	26.8	3.38
4	300,000	633.0	326	0	0	633.0	0.0	38.0	38.0	4.79
7	385,000	812.0	326	0	0	812.0	0.0	138.0	138.0	17.39
8	633,000	1,185.0	562	0	0	1,185.0	0.0	71.1	71.1	8.96
3A	300,000	633.0	326	0	0	633.0	0.0	38.0	38.0	4.79
Totals	2,078,000	4,205.6	1,800	0	0	4,205.6	0.0	341.7	341.7	43.0
				75% LOAD						
1	183,750	371.7	130	0	0	371.7	0.0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0.0	20.1	20.1	2.53
4	225,000	474.8	326	0	0	474.8	0.0	28.5	28.5	3.59
7	288,750	609.0	326	0	0	609.0	0.0	103.5	103.5	13.04
8	474,750	888.8	562	0	0	888.8	0.0	53.3	53.3	6.72
3A	225,000	474.8	326	0	0	474.8	0.0	28.5	28.5	3.59
Totals	1,558,500	3,154.2	1,800	0	0	3,154.2	0.0	256.2	256.2	32.3

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-18
SO_2 EMISSIONS - FUTURE CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Rates For Scenario: Fuel Oil MMBtu/hr	Rates For Scenario: Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	SO_2 Emissions: Bagasse[b] (lb/hr)	SO_2 Emissions: Total (lb/hr)	SO_2 Emissions: Total (g/s)
100% Load										
1	245,000	495.6	130	0	0	495.6	0.0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0.0	26.8	26.8	3.38
4	285,000	600.0	326	0	0	600.0	0.0	36.0	36.0	4.54
7	350,000	738.0	326	0	0	738.0	0.0	125.5	125.5	15.81
8	575,000	1,077.0	562	0	0	1077.0	0.0	64.6	64.6	8.14
3A	285,000	600.0	326	0	0	600.0	0.0	36.0	36.0	4.54
Totals	1,955,000	3,957.6	1,800	0	0	3,957.6	0.0	318.6	318.6	40.1
75% Load										
1	183,750	371.7	130	0	0	371.7	0.0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0.0	20.1	20.1	2.53
4	213,750	450.0	326	0	0	450.0	0.0	27.0	27.0	3.40
7	262,500	553.5	326	0	0	553.5	0.0	94.1	94.1	11.86
8	431,250	807.8	562	0	0	807.8	0.0	48.5	48.5	6.11
3A	213,750	450.0	326	0	0	450.0	0.0	27.0	27.0	3.40
Totals	1,466,250	2,968.2	1,800	0	0	2,968.2	0.0	239.0	239.0	30.1

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-19
PM_{10} EMISSIONS - FUTURE CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	PM10 Emission Factor[b] (lb/MMBtu)	PM_{10} Emissions: Fuel Oil (lb/hr)	Bagasse (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load											
1	245,000	495.6	130	0	0	495.6	0.25	0.0	123.9	123.9	15.61
2	215,000	447.0	130	0	0	447.0	0.25	0.0	111.8	111.8	14.08
4	285,000	600.0	326	0	0	600.0	0.15	0.0	90.0	90.0	11.34
7	350,000	738.0	326	0	0	738.0	0.03	0.0	22.1	22.1	2.79
8	575,000	1,077.0	562	0	0	1,077.0	0.025	0.0	26.9	26.9	3.39
3A	285,000	600.0	326	0	0	600.0	0.15	0.0	90.0	90.0	11.34
Totals	1,955,000	3,957.6	1,800	0	0	3,957.6		0.0	464.7	464.7	58.6
75% Load											
1	183,750	371.7	130	0	0	371.7	0.25	0.0	92.9	92.9	11.71
2	161,250	335.25	130	0	0	335.3	0.25	0.0	83.8	83.8	10.56
4	213,750	450.0	326	0	0	450.0	0.15	0.0	67.5	67.5	8.51
7	262,500	553.5	326	0	0	553.5	0.03	0.0	16.6	16.6	2.09
8	431,250	807.75	562	0	0	807.8	0.025	0.0	20.2	20.2	2.54
3A	213,750	450.0	326	0	0	450.0	0.15	0.0	67.5	67.5	8.51
Totals	1,466,250	2,968.2	1,800	0	0	2,968.2		0.0	348.5	348.5	43.9

[a] Based on maximum capacity of fuel oil burners.

[b] Based on permit limit. PM_{10} assumed to equal PM emissions.

TABLE A-20
CO EMISSIONS - FUTURE CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
1-HR AVERAGING TIME

Boiler	Steam Rate	Heat Input	Maximum Heat Input From Fuel Oil	Rate For Scenario			CO Emission Factor[b]	CO Emissions			
				Fuel Oil		Bagasse		Fuel Oil	Bagasse	Total	
	(lb/hr)	(MMBtu/hr)	(MMBtu/hr)	gal/hr[a]	MMBtu/hr	(MMBtu/hr)	(lb/MMBtu)	(lb/hr)	(lb/hr)	(lb/hr)	(g/s)
					100% LOAD						
1	245,000	495.6	130	0	0	495.6	11.0	0.0	5,451.6	5,451.6	686.90
2	215,000	447.0	130	0	0	447.0	14.0	0.0	6,258.0	6,258.0	788.51
4	300,000	633.0	326	0	0	633.0	11.0	0.0	6,963.0	6963.0	877.34
7	385,000	812.0	326	0	0	812.0	1.1	0.0	893.2	893.2	112.54
8	633,000	1,185.0	562	0	0	1,185.0	3.0	0.0	3,555.0	3555.0	447.93
3A	300,000	633.0	326	0	0	633.0	11.0	0.0	6,963.0	6963.0	877.34
Totals	2,078,000	4,205.6	1,800	0	0	4,205.6		0.0	30,083.8	30,083.8	3,790.6
					75% LOAD						
1	183,750	371.7	130	0	0	371.7	11.0	0.0	4,088.7	4,088.7	515.18
2	161,250	335.3	130	0	0	335.3	14.0	0.0	4,693.5	4,693.5	591.38
4	225,000	474.8	326	0	0	474.8	11.0	0.0	5,222.3	5222.3	658.00
7	288,750	609.0	326	0	0	609.0	1.1	0.0	669.9	669.9	84.41
8	474,750	888.8	562	0	0	888.8	3.0	0.0	2,666.3	2666.3	335.95
3A	225,000	474.8	326	0	0	474.8	11.0	0.0	5,222.3	5222.3	658.00
Totals	1,558,500	3,154.2	1,800	0	0	3,154.2		0.0	22,562.9	22,562.9	2,842.9

[a] Based on maximum capacity of fuel oil burners.

[b] Based on available test data for each boiler.

TABLE A-21
NO_x EMISSIONS - FUTURE CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Rates For Scenario: Fuel Oil MMBtu/hr	Rates For Scenario: Bagasse (MMBtu/hr)	NO_x Emission Factor[b]: Fuel Oil (lb/MMBtu)	NO_x Emission Factor[b]: Bagasse (lb/MMBtu)	NO_x Emissions: Fuel Oil (lb/hr)	NO_x Emissions: Bagasse (lb/hr)	NO_x Emissions: Total (lb/hr)	NO_x Emissions: Total (g/s)
					100% Load							
1	245,000	495.6	130	963	130	365.6	0.17	0.10	22.1	36.6	58.7	7.39
2	215,000	447.0	130	963	130	317.0	0.17	0.10	22.1	31.7	53.8	6.78
4	285,000	600.0	326	0	0	600.0	0.17	0.20	0.0	120.0	120.0	15.12
7	350,000	738.0	326	0	0	738.0	0.20	0.212	0.0	156.5	156.5	19.71
8	575,000	1,077.0	562	0	0	1,077.0	0.14	0.14	0.0	150.8	150.8	19.00
3A	285,000	600.0	326	0	0	600.0	0.17	0.28	0.0	168.0	168.0	21.17
Totals	1,955,000	3,957.6	1,800	1,926	260	3,697.6			44.2	663.5	707.7	89.2
					75% Load							
1	183,750	371.7	130	963	130	241.7	0.17	0.10	22.1	24.2	46.3	5.83
2	161,250	335.3	130	963	130	205.3	0.17	0.10	22.1	20.5	42.6	5.37
4	213,750	450.0	326	0	0	450.0	0.17	0.20	0.0	90.0	90.0	11.34
7	262,500	553.5	326	0	0	553.5	0.20	0.212	0.0	117.3	117.3	14.79
8	431,250	807.8	562	0	0	807.8	0.14	0.14	0.0	113.1	113.1	14.25
3A	285,000	450.0	326	0	0	450.0	0.17	0.28	0.0	126.0	126.0	15.88
Totals	1,537,500	2,968.2	1,800	1,926	260	2,708.2			44.2	491.1	535.3	67.5

[a] Based on maximum capacity of fuel oil burners.

[b] For bagasse burning: Boiler Nos. 1 and 2 based on average of available test data; for Boiler Nos. 4, 7, 8, and 3A, based on permitted limit.

TABLE A-22
SO_2 EMISSIONS - FUTURE OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
3-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load										
Scenario A										
1	**245,000**	**495.6**	**130**	**0**	**0**	**495.6**	**0.0**	**29.7**	**29.7**	**3.75**
2	**215,000**	**447.0**	**130**	**0**	**0**	**447.0**	**0.0**	**26.8**	**26.8**	**3.38**
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**0.0**	**38.0**	**38.0**	**4.79**
Totals	760,000	1,575.6	1,800	0	0	1,575.6	0.0	94.5	94.5	11.9
Scenario B										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	**385,000**	**812.0**	**326**	**0**	**0**	**812.0**	**0.0**	**138.0**	**138.0**	**17.39**
8	**633,000**	**1,185.0**	**562**	**0**	**0**	**1,185.0**	**0.0**	**71.1**	**71.1**	**8.96**
3A	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
Totals	1,018,000	1,997.0	1,800	0	0	1,997.0	0.0	209.1	209.1	26.4
Scenario C										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	**350,000**	**812.0**	**326**	**0**	**0**	**812.0**	**0**	**138.0**	**138.0**	**17.39**
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**0**	**38.0**	**38.0**	**4.79**
Totals	650,000	1,445.0	1,800.0	0.0	0.0	1,445.0	0.0	176.0	176.0	22.2
Scenario D										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**0**	**38.0**	**38.0**	**4.79**
7	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**0**	**38.0**	**38.0**	**4.79**
Totals	600,000	1,266.0	1,800.0	0.0	0.0	1,266.0	0.0	76.0	76.0	9.6
75% Load										
Scenario A										
1	**183,750**	**371.7**	**130**	**0**	**0**	**371.7**	**0.0**	**22.3**	**22.3**	**2.81**
2	**161,250**	**335.3**	**130**	**0**	**0**	**335.3**	**0.0**	**20.1**	**20.1**	**2.53**
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**225,000**	**474.8**	**326**	**0**	**0**	**474.8**	**0.0**	**28.5**	**28.5**	**3.59**
Totals	570,000	1,181.7	1,800	0	0	1,181.7	0.0	70.9	70.9	8.9
Scenario B										
1	0	0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	**288,750**	**609.0**	**326**	**0**	**0**	**609.0**	**0.0**	**103.5**	**103.5**	**13.04**
8	**474,750**	**888.8**	**562**	**0**	**0**	**888.8**	**0.0**	**53.3**	**53.3**	**6.72**
3A	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
Totals	763,500	1,497.8	1,800	0	0	1,497.8	0.0	156.9	156.9	19.8
Scenario C										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	**262,500**	**609.0**	**326**	**0**	**0**	**609.0**	**0.0**	**103.5**	**103.5**	**13.04**
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**225,000**	**474.8**	**326**	**0**	**0**	**474.8**	**0.0**	**28.5**	**28.5**	**3.59**
Totals	487,500	1,083.8	1,800	0	0	1,083.8	0.0	132.0	132.0	16.6
Scenario D										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	**225,000**	**474.8**	**326**	**0**	**0**	**474.8**	**0.0**	**28.5**	**28.5**	**3.59**
7	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**225,000**	**474.8**	**326**	**0**	**0**	**474.8**	**0.0**	**28.5**	**28.5**	**3.59**
Totals	450,000	949.5	1,800	0	0	949.5	0.0	57.0	57.0	7.2
50% Load										
Scenario A										
1	**122,500**	**247.8**	**130**	**0**	**0**	**247.8**	**0.0**	**14.9**	**14.9**	**1.87**
2	**107,500**	**223.5**	**130**	**0**	**0**	**223.5**	**0.0**	**13.4**	**13.4**	**1.69**
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**150,000**	**316.5**	**326**	**0**	**0**	**316.5**	**0.0**	**19.0**	**19.0**	**2.39**
Totals	380,000	787.8	1,800	0	0	787.8	0.0	47.3	47.3	6.0
Scenario B										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	**192,500**	**406.0**	**326**	**0**	**0**	**406.0**	**0.0**	**69.0**	**69.0**	**8.70**
8	**316,500**	**592.5**	**562**	**0**	**0**	**592.5**	**0.0**	**35.6**	**35.6**	**4.48**
3A	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
Totals	509,000	998.5	1,800	0	0	998.5	0.0	104.6	104.6	13.2
Scenario C										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
7	**175,000**	**406.0**	**326**	**0**	**0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.00**
8	0	0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**150,000**	**316.5**	**326**	**0**	**0**	**316.5**	**0.0**	**19.0**	**19.0**	**2.39**
Totals	325,000	722.5	1,800	0	0	316.5	0.0	19.0	19.0	2.4
Scenario D										
1	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.0	0.0	0.0	0.00
4	**150,000**	**316.5**	**326**	**0**	**0**	**316.5**	**0.0**	**19.0**	**19.0**	**2.39**
7	0	0.0	326	0	0	0.0	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.0	0.0	0.0	0.00
3A	**150,000**	**316.5**	**326**	**0**	**0**	**316.5**	**0.0**	**19.0**	**19.0**	**2.39**
Totals	300,000	633.0	1,800	0	0	633.0	0.0	38.0	38.0	4.8

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-23
SO_2 EMISSIONS - FUTURE OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	SO_2 Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load										
Scenario A										
1	245,000	495.6	130	0	0	495.6	0	29.7	29.7	3.75
2	215,000	447.0	130	0	0	447.0	0	26.8	26.8	3.38
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
3A	285,000	600.0	326	0	0	600.0	0	36.0	36.0	4.54
Totals	745,000	1,542.6	1,800.0	0.0	0.0	1,542.6	0.0	92.6	92.6	11.7
Scenario B										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0	0.0	0.0	0.00
7	350,000	738.0	326	0	0	738.0	0	125.5	125.5	15.81
8	575,000	1,077.0	562	0	0	1,077.0	0	64.6	64.6	8.14
3A	0	0	326	0	0	0.0	0	0.0	0.0	0.00
Totals	925,000	1,815.0	1,800.0	0.0	0.0	1,815.0	0.0	190.1	190.1	24.0
Scenario C										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	350,000	738	326	0	0	738.0	0	125.5	125.5	15.81
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
3A	285,000	600.0	326	0	0	600.0	0	36.0	36.0	4.54
Totals	635,000	1,338.0	1,800.0	0.0	0.0	1,338.0	0.0	161.5	161.5	20.3
Scenario D										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	285,000	600	326	0	0	600.0	0	36.0	36.0	4.54
7	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	285,000	600	326	0	0	600.0	0	36.0	36.0	4.54
Totals	570,000	1,200.0	1,800.0	0.0	0.0	1,200.0	0.0	72.0	72.0	9.1
75% Load										
Scenario A										
1	183,750	371.7	130	0	0	371.7	0	22.3	22.3	2.81
2	161,250	335.3	130	0	0	335.3	0	20.1	20.1	2.53
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
3A	213,750	450.0	326	0	0	450.0	0	27.0	27.0	3.40
Totals	558,750	1,157.0	1,800.0	0.0	0.0	1,157.0	0.0	69.4	69.4	8.7
Scenario B										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0	0.0	0.0	0.00
7	262,500	553.5	326	0	0	553.5	0	94.1	94.1	11.86
8	431,250	807.8	562	0	0	807.8	0	48.5	48.5	6.11
3A	0	0	326	0	0	0.0	0	0.0	0.0	0.00
Totals	693,750	1,361.3	1,800.0	0.0	0.0	1,361.3	0.0	142.6	142.6	18.0
Scenario C										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	262,500	554	326	0	0	553.5	0	94.1	94.1	11.86
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
3A	213,750	450.0	326	0	0	450.0	0	27.0	27.0	3.40
Totals	476,250	1,003.5	1,800.0	0.0	0.0	1,003.5	0.0	121.1	121.1	15.3
Scenario D										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	213,750	450.0	326	0	0	450.0	0	27.0	27.0	3.40
7	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	213,750	450.0	326	0	0	450.0	0	27.0	27.0	3.40
Totals	427,500	900.0	1,800.0	0.0	0.0	900.0	0.0	54.0	54.0	6.8
50% Load										
Scenario A										
1	122,500	247.8	130	0	0	247.8	0	14.9	14.9	1.87
2	107,500	223.5	130	0	0	223.5	0	13.4	13.4	1.69
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	142,500	300.0	326	0	0	300.0	0	18.0	18.0	2.27
Totals	372,500	771.3	1,800.0	0.0	0.0	771.3	0.0	46.3	46.3	5.8
Scenario B										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	175,000	369.0	326	0	0	369.0	0	62.7	62.7	7.90
8	287,500	538.5	562	0	0	538.5	0	32.3	32.3	4.07
3A	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
Totals	462,500	907.5	1,800.0	0.0	0.0	907.5	0.0	95.0	95.0	12.0
Scenario C										
1	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0	0.0	0.0	0.00
4	0	0.0	326	0	0	0.0	0	0.0	0.0	0.00
7	175,000	369	326	0	0	369.0	0	62.7	62.7	7.90
8	0	0.0	562	0	0	0.0	0	0.0	0.0	0.00
3A	142,500	300	326	0	0	300.0	0	18.0	18.0	2.27
Totals	317,500	669.0	1,800.0	0.0	0.0	669.0	0.0	80.7	80.7	10.2
Scenario D										
1	0	0	130	0	0	0.0	0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0	0.0	0.0	0.00
4	142,500	300	326	0	0	300.0	0	18.0	18.0	2.27
7	0	0	326	0	0	0.0	0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0	0.0	0.0	0.00
3A	142,500	300	326	0	0	300.0	0	18.0	18.0	2.27
Totals	285,000	600.0	1,800.0	0.0	0.0	600.0	0.0	36.0	36.0	4.5

[a] Based on maximum capacity of fuel oil burners.

[b] Based on 0.06 lb/MMBtu SO_2 due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu, and Boiler No. 8 based on permit limit of 0.06 lb/MMBtu.

TABLE A-24
PM_{10} EMISSIONS - FUTURE OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	PM10 Emission Factor[b] (lb/MMBtu)	PM_{10} Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load											
Scenario A											
1	**245,000**	**495.6**	**130**	**0**	**0**	**495.6**	**0.25**	**0.0**	**123.9**	**123.9**	**15.61**
2	**215,000**	**447.0**	**130**	**0**	**0**	**447.0**	**0.25**	**0.0**	**111.8**	**111.8**	**14.08**
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.15**	**0.0**	**90.0**	**90.0**	**11.34**
Totals	745,000	1,542.6	1,800	0	0	1,542.6		0.0	325.7	325.7	41.0
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	**350,000**	**738.0**	**326**	**0**	**0**	**738.0**	**0.03**	**0.0**	**22.1**	**22.1**	**2.79**
8	**575,000**	**1,077.0**	**562**	**0**	**0**	**1,077.0**	**0.025**	**0.0**	**26.9**	**26.9**	**3.39**
3A	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
Totals	925,000	1,815.0	1,800	0	0	1,815.0		0.0	49.1	49.1	6.18
Scenario D											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.15**	**0.0**	**90.0**	**90.0**	**11.34**
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.15**	**0.0**	**90.0**	**90.0**	**11.34**
Totals	570,000	1,200.0	1,800	0	0	1,200.0		0.0	180.0	180.0	22.7
75% Load											
Scenario A											
1	**183,750**	**371.7**	**130**	**0**	**0**	**371.7**	**0.25**	**0.0**	**92.9**	**92.9**	**11.71**
2	**161,250**	**335.3**	**130**	**0**	**0**	**335.3**	**0.25**	**0.0**	**83.8**	**83.8**	**10.56**
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**213,750**	**450.0**	**326**	**0**	**0**	**450.0**	**0.15**	**0.0**	**67.5**	**67.5**	**8.51**
Totals	558,750	1,157.0	1,800	0	0	1,157.0		0.0	244.2	244.2	30.8
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	**262,500**	**553.5**	**326**	**0**	**0**	**553.5**	**0.03**	**0.0**	**16.6**	**16.6**	**2.09**
8	**431,250**	**807.8**	**562**	**0**	**0**	**807.8**	**0.025**	**0.0**	**20.2**	**20.2**	**2.54**
3A	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
Totals	693,750	1,361.3	1,800	0	0	1,361.3		0.0	36.8	36.8	4.64
Scenario D											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	**213,750**	**450**	**326**	**0**	**0**	**450.0**	**0.15**	**0.0**	**67.5**	**67.5**	**8.51**
7	0	0.0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**213,750**	**450**	**326**	**0**	**0**	**450.0**	**0.15**	**0.0**	**67.5**	**67.5**	**8.51**
Totals	427,500	900.0	1,800	0	0	900.0		0.0	135.0	135.0	17.01
50% Load											
Scenario A											
1	**122,500**	**247.8**	**130**	**0**	**0**	**247.8**	**0.25**	**0.0**	**62.0**	**62.0**	**7.81**
2	**107,500**	**223.5**	**130**	**0**	**0**	**223.5**	**0.25**	**0.0**	**55.9**	**55.9**	**7.04**
4	0	0.0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	0	0.0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.15**	**0.0**	**45.0**	**45.0**	**5.67**
Totals	372,500	771.3	1,800	0	0	771.3		0.0	162.8	162.8	20.5
Scenario B											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
7	**175,000**	**369.0**	**326**	**0**	**0**	**369.0**	**0.03**	**0.0**	**11.1**	**11.1**	**1.39**
8	**287,500**	**539**	**562**	**0**	**0**	**538.5**	**0.025**	**0.0**	**13.5**	**13.5**	**1.70**
3A	0	0	326	0	0	0.0	0.15	0.0	0.0	0.0	0.00
Totals	462,500	907.5	1,800	0	0	907.5		0.0	24.5	24.5	3.09
Scenario D											
1	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.25	0.0	0.0	0.0	0.00
4	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.15**	**0.0**	**45.0**	**45.0**	**5.67**
7	0	0	326	0	0	0.0	0.03	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.025	0.0	0.0	0.0	0.00
3A	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.15**	**0.0**	**45.0**	**45.0**	**5.67**
Totals	285,000	600.0	1,800	0	0	600.0		0.0	90.0	90.0	11.34

[a] Based on maximum capacity of fuel oil burners.

[b] Based on permit limit. PM_{10} assumed to equal PM emissions.

TABLE A-25
CO EMISSIONS - FUTURE OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
1-HR AND 8-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Fuel Oil MMBtu/hr	Bagasse (MMBtu/hr)	CO Emission Factor[b] (lb/MMBtu)	CO Emissions: Fuel Oil (lb/hr)	Bagasse[b] (lb/hr)	Total (lb/hr)	Total (g/s)
100% Load											
Scenario A											
1	**245,000**	**495.6**	**130**	**0**	**0**	**495.6**	**11.0**	**0.0**	**5,451.6**	**5,451.6**	**686.90**
2	**215,000**	447.0	**130**	**0**	**0**	**447.0**	**14.0**	**0.0**	**6,258.0**	**6,258.0**	**788.51**
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
3A	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**11.0**	**0.0**	**6,963.0**	**6,963.0**	**877.34**
Totals	760,000	1,576	1,800	0	0	1,575.6		0.0	18,672.6	18,672.6	2,352.7
Scenario B											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	**385,000**	**812.0**	**326**	**0**	**0**	**812.0**	**1.1**	**0.0**	**893.2**	**893.2**	**112.54**
8	**633,000**	**1,185.0**	**562**	**0**	**0**	**1,185.0**	**3.0**	**0.0**	**3,555.0**	**3555.0**	**447.93**
3A	0	0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
Totals	1,018,000	1,997	1,800	0	0	1,997.0		0.0	4,448.2	4,448.2	560.5
Scenario D											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**11.0**	**0.0**	**6,963.0**	**6963.0**	**877.34**
7	0	0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
3A	**300,000**	**633.0**	**326**	**0**	**0**	**633.0**	**11.0**	**0.0**	**6,963.0**	**6,963.0**	**877.34**
Totals	600,000	1,266	1,800	0	0	1,266.0		0.0	13,926.0	13,926.0	1,754.7
75% Load											
Scenario A											
1	**183,750**	**371.7**	**130**	**0**	**0**	**371.7**	**11.0**	**0.0**	**4,088.7**	**4,088.7**	**515.18**
2	**161,250**	**335.3**	**130**	**0**	**0**	**335.3**	**14.0**	**0.0**	**4,693.5**	**4,693.5**	**591.38**
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
3A	**225,000**	**475**	**562**	**0**	**0**	**474.8**	**11.0**	**0.0**	**5,222.3**	**5,222.3**	**658.00**
Totals	570,000	1,181.7	2,036	0	0	1,181.7		0.0	14,004.5	14,004.5	1,764.6
Scenario B											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	**288.750**	**609.0**	**326**	**0**	**0**	**609.0**	**1.1**	**0.0**	**669.9**	**669.9**	**84.41**
8	**474,750**	**888.8**	**562**	**0**	**0**	**888.8**	**3.0**	**0.0**	**2,666.3**	**2,666.3**	**335.95**
3A	0	0.0	562	0	0	0.0	11.0	0.0	0.0	0.0	0.00
Totals	763,500	1,497.8	2,036	0	0	1,497.8		0.0	3,336.2	3,336.2	420.4
Scenario D											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	**225,000**	**474.8**	**326**	**0**	**0**	**474.8**	**11.0**	**0.0**	**5,222.3**	**5222.3**	**658.00**
7	0	0.0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	3.0	0.0	0.0	-	0.00
3A	**225,000**	**474.8**	**562**	**0**	**0**	**474.8**	**11.0**	**0.0**	**5,222.3**	**5222.3**	**658.00**
Totals	450,000	949.5	2,036	0	0	949.5		0.0	10,444.5	10,444.5	1,316.0
50% Load											
Scenario A											
1	**122,500**	**247.8**	**130**	**0**	**0**	**247.8**	**11.0**	**0.0**	**2,725.8**	**2,725.8**	**343.45**
2	**107,500**	**223.5**	**130**	**0**	**0**	**223.5**	**14.0**	**0.0**	**3,129.0**	**3,129.0**	**394.25**
4	0	0.0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
3A	**150,000**	**316.5**	**562**	**0**	**0**	**316.5**	**11.0**	**0.0**	**3,481.5**	**3,481.5**	438.67
Totals	380,000	787.8	2,036	0	0	787.8		0.0	9,336.3	9,336.3	1,176.4
Scenario B											
1	0	0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	11.0	0.0	0.0	0.0	0.00
7	**192,500**	**406.0**	**326**	**0**	**0**	**406.0**	**1.1**	**0.0**	**446.6**	**446.6**	**56.27**
8	**316,500**	**592.5**	**562**	**0**	**0**	**592.5**	**3.0**	**0.0**	**1,777.5**	**1,777.5**	**223.97**
3A	0	0.0	562	0	0	0.0	11.0	0.0	0.0	0.0	0.00
Totals	509,000	998.5	2,036	0	0	998.5		0.0	2,224.1	2,224.1	280.2
Scenario D											
1	0	0.0	130	0	0	0.0	11.0	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	14.0	0.0	0.0	0.0	0.00
4	**150,000**	**316.5**	**326**	**0**	**0**	**316.5**	**11.0**	**0.0**	**3,481.5**	**3481.5**	**438.67**
7	0	0	326	0	0	0.0	1.1	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	3.0	0.0	0.0	0.0	0.00
3A	**150,000**	**316.5**	**562**	**0**	**0**	**316.5**	**11.0**	**0.0**	**3,481.5**	**3,481.5**	438.67
Totals	300,000	633.0	2,036	0	0	633.0		0.0	6,963.0	6,963.0	877.3

[a] Based on maximum capacity of fuel oil burners.

[b] Based on available test data for each boiler.

TABLE A-26
NO_x EMISSIONS - EXISTING OFF-CROP SEASON OPERATION
U.S. SUGAR CLEWISTON MILL
24-HR AVERAGING TIME

Boiler	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Maximum Heat Input From Fuel Oil[a] (MMBtu/hr)	Rates For Scenario: Fuel Oil gal/hr[a]	Rates For Scenario: Fuel Oil MMBtu/hr	Rates For Scenario: Bagasse (MMBtu/hr)	NO_x Emission Factor: Fuel Oil (lb/MMBtu)	NO_x Emission Factor: Bagasse (lb/MMBtu)	NO_x Emissions: Fuel Oil (lb/hr)	NO_x Emissions: Bagasse[b] (lb/hr)	NO_x Emissions: Total (lb/hr)	NO_x Emissions: Total (g/s)
100% Load												
Scenario A												
1	**245,000**	**495.6**	**130**	**963**	**130**	**365.6**	**0.17**	**0.10**	**22.1**	**36.6**	**58.7**	**7.39**
2	**215,000**	**447.0**	**130**	**963**	**130**	**317.0**	**0.17**	**0.10**	**22.1**	**31.7**	**53.8**	**6.78**
4	0	0.0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.17**	**0.28**	**0.0**	**168.0**	**168.0**	**21.17**
Totals	745,000	1,542.6	1,800	1,926	260	1,282.6			44.2	236.3	280.5	35.3
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	**350,000**	**738.0**	**326**	**0**	**0**	**738.0**	**0.20**	**0.212**	**0.0**	**156.5**	**156.5**	**19.71**
8	**575,000**	**1,077.0**	**562**	**0**	**0**	**1,077.0**	**0.14**	**0.14**	**0.0**	**150.8**	**150.8**	**19.00**
3A	0	0	326	0	0	0.0	0.17	0.28	0.0	0.0	0.0	0.00
Totals	925,000	1,815.0	1,800	0	0	1,815.0			0.0	307.2	307.2	38.7
Scenario D												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0.0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.17**	**0.20**	**0.0**	**120.0**	**120.0**	**15.12**
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**285,000**	**600.0**	**326**	**0**	**0**	**600.0**	**0.17**	**0.28**	**0.0**	**168.0**	**168.0**	**21.17**
Totals	570,000	1,200.0	1,800	0	0	1,200.0			0.0	288.0	288.0	36.3
75% Load												
Scenario A												
1	**183,750**	**371.7**	**130**	**963**	**130**	**241.7**	**0.17**	**0.10**	**22.1**	**24.2**	**46.3**	**5.83**
2	**161,250**	**335.3**	**130**	**963**	**130**	**205.3**	**0.17**	**0.10**	**22.1**	**20.5**	**42.6**	**5.37**
4	0	0.0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**213,750**	**450.0**	**326**	**0**	**0**	**450.0**	**0.17**	**0.28**	**0.0**	**126.0**	**126.0**	**15.88**
Totals	558,750	1,157.0	1,800	1,926	260	897.0			44.2	170.7	214.9	27.1
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	**262,500**	**553.5**	**326**	**0**	**0**	**553.5**	**0.20**	**0.212**	**0.0**	**117.3**	**117.3**	**14.79**
8	**431,250**	**807.8**	**562**	**0**	**0**	**807.8**	**0.14**	**0.14**	**0.0**	**113.1**	**113.1**	**14.25**
3A	0	0	326	0	0	0.0	0.17	0.28	0.0	0.0	0.0	0.00
Totals	693,750	1,361.3	1,800	0	0	1,361.3			0.0	230.4	230.4	29.0
Scenario D												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	**213,750**	**450.0**	**326**	**0**	**0**	**450.0**	**0.17**	**0.20**	**0.0**	**90.0**	**90.0**	**11.34**
7	0	0.0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**213,750**	**450.0**	**326**	**0**	**0**	**450.0**	**0.17**	**0.28**	**0.0**	**126.0**	**126.0**	**15.88**
Totals	427,500	900.0	1,800	0	0	900.0			0.0	216.0	216.0	27.2
50% Load												
Scenario A												
1	**122,500**	**247.8**	**130**	**963**	**130**	**117.8**	**0.17**	**0.10**	**22.1**	**11.8**	**33.9**	**4.27**
2	**107,500**	**223.5**	**130**	**963**	**130**	**93.5**	**0.17**	**0.10**	**22.1**	**9.4**	**31.5**	**3.96**
4	0	0.0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	0	0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.17**	**0.28**	**0.0**	**84.0**	**84.0**	**10.58**
Totals	372,500	771.3	1,800	1,926	260	511.3			44.2	105.1	149.3	18.8
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	0	0	326	0	0	0.0	0.17	0.20	0.0	0.0	0.0	0.00
7	**175,000**	**369.0**	**326**	**0**	**0**	**369.0**	**0.20**	**0.212**	**0.0**	**78.2**	**78.2**	**9.86**
8	**287,500**	**538.5**	**562**	**0**	**0**	**538.5**	**0.14**	**0.14**	**0.0**	**75.4**	**75.4**	**9.50**
3A	0	0.0	326	0	0	0.0	0.17	0.28	0.0	0.0	0.0	0.00
Totals	462,500	907.5	1,800	0	0	907.5			0.0	153.6	153.6	19.4
Scenario B												
1	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
2	0	0	130	0	0	0.0	0.17	0.10	0.0	0.0	0.0	0.00
4	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.17**	**0.20**	**0.0**	**60.0**	**60.0**	**7.56**
7	0	0.0	326	0	0	0.0	0.20	0.212	0.0	0.0	0.0	0.00
8	0	0.0	562	0	0	0.0	0.14	0.14	0.0	0.0	0.0	0.00
3A	**142,500**	**300.0**	**326**	**0**	**0**	**300.0**	**0.17**	**0.28**	**0.0**	**84.0**	**84.0**	**10.58**
Totals	285,000	600.0	1,800	0	0	600.0			0.0	144.0	144.0	18.1

[a] Based on maximum capacity of fuel oil burners.

[b] For bagasse burning: Boiler Nos. 1 and 2 based on average of available test data; for Boiler Nos. 4, 7, 8, and 3A, based on permitted limit.
For fuel oil burning: Boiler Nos. 1, 2, 4, and 3A, based on burner design, confirmed by testing; for Boiler Nos. 7 and 8, based on permitted limit.

TABLE A-27
SUMMARY OF STACK PARAMETERS FOR SOURCES USED IN MODELING OF U.S. SUGAR BRYANT MILL

Emission Unit	AERMOD Modeling ID	Stack Height		Stack Diameter		Temperature		Flow Rate	Velocity		UTM Location (a)	
		ft	m	ft	m	°F	K	acfm	ft/s	m/s	East (m)	North (m)
						100% LOAD						
Boiler 1	USSBRY1	65	19.8	5.40	1.65	160	344.3	156,000	113.5	34.6	537809.8	2,969,095.1
Boiler 2	USSBRY2	65	19.8	5.40	1.65	160	344.3	156,000	113.5	34.6	537814.7	2,969,113.4
Boiler 3	USSBRY3	65	19.8	5.40	1.65	160	344.3	156,000	113.5	34.6	537819.6	2,969,131.7
Boiler 5	USSBRY5	150	45.7	9.50	2.90	142	334.3	215,000	50.6	15.4	537809.1	2,969,151.2
						75% LOAD						
Boiler 1	USSBRY1	65	19.8	5.40	1.65	160	344.3	117,000	85.1	26.0	537809.8	2,969,095.1
Boiler 2	USSBRY2	65	19.8	5.40	1.65	160	344.3	117,000	85.1	26.0	537814.7	2,969,113.4
Boiler 3	USSBRY3	65	19.8	5.40	1.65	160	344.3	117,000	85.1	26.0	537819.6	2,969,131.7
Boiler 5	USSBRY5	150	45.7	9.50	2.90	142	334.3	161,250	37.9	11.6	537809.1	2,969,151.2

(a) UTM Zone 17, NAD27

Note: Stack parameters based on Title V renewal application submitted May 2005.

TABLE A-28
STACK AND OPERATING PARAMETERS FOR BOILERS USED IN THE MODELING ANALYSIS, U.S. SUGAR CLEWISTON MILL

Emission Unit	Model ID	UTM Coordinates [a] East (m)	UTM Coordinates [a] North (m)	Stack Data [b] Height ft	Stack Data [b] Height m	Stack Data [b] Diameter ft	Stack Data [b] Diameter m	Heat Input (MMBtu/hr)	Operating Data [b] Temperature °F	Operating Data [b] Temperature °K	Operating Data [b] Flow acfm	Operating Data [b] Velocity ft/s	Operating Data [b] Velocity m/s
Boiler No. 1	BLR1	506,173.7	2,956,934.5	213	64.9	8.0	2.44	495.6	150	339	250,000	82.9	25.3
Boiler No. 2	BLR2	506,161.2	2,956,934.6	213	64.9	8.0	2.44	447.0	150	339	250,000	82.9	25.3
Boiler No. 4	BLR4	506,115.5	2,956,931.9	150	45.7	8.2	2.50	633.0	160	344	281,000	88.7	27.0
Boiler No. 7	BLR7	506,081.1	2,956,952.4	225	68.6	8.0	2.44	812.0	335	441	341,000	113.1	34.5
Boiler No. 8	BLR8	506,032.9	2,956,982.7	199	60.7	13.0	3.96	1,185.0	265	403	434,000	54.5	16.6
Boiler No. 3A	BLR3A	506,131.8	2,956,931.8	150	45.7	9.5	2.90	633.0	142	334	215,000	50.6	15.4
Boiler No. 1	BLR1	506,173.7	2,956,934.5	213	64.9	8.0	2.44	495.6	150	339	250,000	82.9	25.3
Boiler No. 2	BLR2	506,161.2	2,956,934.6	213	64.9	8.0	2.44	447.0	150	339	250,000	82.9	25.3
Boiler No. 4	BLR4	506,115.5	2,956,931.9	150	45.7	8.2	2.50	600.0	160	344	266,351	84.1	25.6
Boiler No. 7	BLR7	506,081.1	2,956,952.4	225	68.6	8.0	2.44	738.0	335	441	309,924	102.8	31.3
Boiler No. 8	BLR8	506,032.9	2,956,982.7	199	60.7	13.0	3.96	1,077.0	265	403	394,446	49.5	15.1
Boiler No. 3A	BLR3A	506,131.8	2,956,931.8	150	45.7	9.5	2.90	600.0	142	334	203,791	47.9	14.6
Boiler No. 1	BLR1	506,173.7	2,956,934.5	213	64.9	8.0	2.44	371.7	150	339	187,500	62.2	18.9
Boiler No. 2	BLR2	506,161.2	2,956,934.6	213	64.9	8.0	2.44	335.3	150	339	187,500	62.2	18.9
Boiler No. 4	BLR4	506,115.5	2,956,931.9	150	45.7	8.2	2.50	450.0	160	344	210,750	66.5	20.3
Boiler No. 7	BLR7	506,081.1	2,956,952.4	225	68.6	8.0	2.44	553.5	335	441	255,750	84.8	25.8
Boiler No. 8	BLR8	506,032.9	2,956,982.7	199	60.7	13.0	3.96	807.8	265	403	325,500	40.9	12.5
Boiler No. 3A	BLR3A	506,131.8	2,956,931.8	150	45.7	9.5	2.90	450.0	142	334.3	161,250	37.9	11.6
Boiler No. 1	BLR1	506,173.7	2,956,934.5	213	64.9	8.0	2.44	247.8	150	339	125,000	41.4	12.6
Boiler No. 2	BLR2	506,161.2	2,956,934.6	213	64.9	8.0	2.44	223.5	150	339	125,000	41.4	12.6
Boiler No. 4	BLR4	506,115.5	2,956,931.9	150	45.7	8.2	2.50	300.0	160	344	140,500	44.3	13.5
Boiler No. 7	BLR7	506,081.1	2,956,952.4	225	68.6	8.0	2.44	369.0	335	441	170,500	56.5	17.2
Boiler No. 8	BLR8	506,032.9	2,956,982.7	199	60.7	13.0	3.96	538.5	265	403	217,000	27.2	8.3
Boiler No. 3A	BLR3A	506,131.8	2,956,931.8	150	45.7	9.5	2.90	300.0	142	334	107,500	25.3	7.7

[a] Universal transverse coordinates, zone 17, NAD27

[b] Stack and operating data for future sources based on Title V renewal application (2005).

TABLE A-29
SUMMARY OF THE STACK, OPERATING, AND PM_{10} EMISSIONS FOR REFINERY AND SUGAR MILL SOURCES, U.S. SUGAR CLEWISTON

			UTM NAD27		Stack Parameters									PM_{10} Emission Rate	
	EU	AERMOD	East	North	Height		Diameter		Temperature		Flow Rate	Velocity			
Units	ID	ID Name	(m)	(m)	(ft)	(m)	(ft)	(m)	(°F)	(K)	(acfm)	(ft/s)	(m/s)	lb/hr	g/s
Refinery Sources															
Vacuum Systems S-1	018	S1	506,334.2	2,956,889.4	65	19.81	0.50	0.15	68	293	1,705	0.033	0.01 [a]	0.06	0.0076
Vacuum Systems S-2	018	S2	506,342.5	2,956,892.2	65	19.81	0.50	0.15	90	305	1,564	0.033	0.01 [a]	0.06	0.0076
Vacuum Systems S-3	018	S3	506,342.5	2,956,892.2	65	19.81	0.50	0.15	90	305	1,585	0.033	0.01 [a]	0.06	0.0076
Packaging S-4	022	S4	506,364.9	2,956,895.2	60	18.29	1.94	0.59	125	325	11,500	0.033	0.01 [a]	0.21	0.0265
Screning and Distribution S-5	020	S5	506,342.5	2,956,892.2	72	21.95	0.95	0.29	125	325	3,200	0.033	0.01 [a]	0.06	0.0076
Screening and Distribution S-6	020	S6	506,342.5	2,956,892.2	72	21.95	1.94	0.59	125	325	10,500	0.033	0.01 [a]	0.19	0.0239
Conditioning Silos S-7	019	S7	506,320.9	2,956,890.7	130	39.62	1.37	0.42	110	316	3,000	0.033	0.01 [a]	0.06	0.0076
Conditioning Silos S-8	019	S8	506,311.1	2,956,888.4	130	39.62	1.37	0.42	110	316	3,000	0.033	0.01 [a]	0.06	0.0076
Conditioning Silos S-9	019	S9	506,300.6	2,956,886.0	130	39.62	1.37	0.42	110	316	3,000	0.033	0.01 [a]	0.06	0.0076
White Sugar Dryer No. 1: S-10	016	S10	506,341.3	2,956,878.0	75	22.86	7.31	2.23	115	319	113,000	0.033	0.01 [a]	1.43	0.1802
V.H.P. Sugar Dryer S-11	015	S11	506,534.8	2,956,984.3	30	9.14	4.79	1.46	115	319	127,000	117.5	35.8	1.63	0.2054
Granular Carbon Furnace S-12	017	S12	506,311.8	2,956,815.4	30	9.14	2.00	0.61	160	344	4,300	22.81	7.0	0.63	0.0794
White Sugar Dryer No. 2: S-13	029	S13	506,310.5	2,956,870.8	80	24.38	7.31	2.23	113	318	92,000	0.033	0.01 [a]	4.2	0.53
Sugar Mill Sources															
BT-13 Lime Silo #1	031	BT3LS1	506,422.9	2,956,999.5	65	19.81	0.67	0.20	75	297	475	0.033	0.01 [a]	0.08	0.010
BT-13 Lime Silo #2	031	BT3LS2	506,429.7	2,956,999.5	65	19.81	0.67	0.20	75	297	475	0.033	0.01 [a]	0.08	0.010
BT-13 Lime Railcar Receiver	031	BT3LRR	506,437.0	2,957,004.7	65	19.81	0.67	0.20	75	297	475	0.033	0.01 [a]	0.08	0.010
Molasses Plant Salt Silo		MOLSALTS	505,915.3	2,956,926.0	30	9.14	0.67	0.20	75	297	750	0.033	0.01 [a]	0.13	0.016
Molasses Plant Limestone Silo	030	MOLLSS	505,915.3	2,956,916.3	40	12.19	0.67	0.20	75	297	750	0.033	0.01 [a]	0.13	0.016
Water Treatment Lime Silo	010	WWTPLS	506,459.1	2,957,217.3	40	12.19	0.67	0.20	75	297	750.0	0.033	0.01 [a]	0.13	0.016

[a] Discharge is horizontal: velocity set to 0.01 m/s for modeling purposes.

APPENDIX B

TABLE B-1

SUMMARY OF SO_2 FACILITIES CONSIDERED FOR INCLUSION IN THE AAQS AND PSD CLASS II AIR MODELING ANALYSES

AIRS Number	Facility	County	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to U.S. Sugar Clewiston [a] X (km)	Relative to U.S. Sugar Clewiston [a] Y (km)	Relative to U.S. Sugar Clewiston [a] Distance (km)	Relative to U.S. Sugar Clewiston [a] Direction (deg)	Maximum SO_2 Emissions (TPY)	Q, Emission Threshold [b] (Dist - SIA) x 20	Include in Modeling Analysis ?
Modeling Area [c]											
0510003	U.S. Sugar - Clewiston	Hendry	506.1	2956.9	0	0	0	NA	1,160	SIA	YES
0990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	31.7	12.2	34.0	69	2,698	479	YES
Screening Area [c]											
0510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-18.5	0.7	18.5	272	173	170	YES
0430008	Atlas-Transoil Inc - South FL Thermal Service	Hendry	489.2	2966.6	-16.9	9.7	19.5	300	85	190	NO
0990332	New Hope Power (Okeelanta)	Palm Beach	524.1	2940.0	18.0	-16.9	24.7	133	1,999	294	YES
0990005	Okeelanta Corp.	Palm Beach	525.0	2937.4	18.9	-19.5	27.2	136	51	343	NO
0510003	Sugar Cane Growers Coop.	Palm Beach	534.9	2953.3	28.8	-3.6	29.0	97	2,555	380	YES
0990019	Osceola Farms	Palm Beach	544.2	2968.0	38.1	11.1	39.7	74	1,467	594	YES
0990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	46.8	-11.7	48.2	104	954	765	YES
0990349	SFWMD - Pump Stn. G-310/S-6	Palm Beach	554.2	2940.5	48.1	-16.4	50.8	109	5	816	NO
0850001	FPL - Martin	Martin	543.1	2992.9	37.0	36.0	51.6	46	22,982	832	YES
0850102	Indiantown Cogeration L.P.	Martin	545.6	2991.5	39.5	34.6	52.5	49	2,629	850	YES
0990021	United Technologies Corp. (Pratt & Whitney Airc	Palm Beach	562.0	2960.0	55.9	3.1	56.0	87	1,390	920	YES
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	44.8	61.2	75.8	36	76	1,317	NO
0990234	Palm Beach County Resource Recovery	Palm Beach	585.8	2960.2	79.7	3.3	79.8	88	1,533	1,395	YES
0710119	Lee County Resource Recovery	Lee	424.2	2945.7	-81.9	-11.2	82.7	262	163	1,453	NO
0710000	FPL - Fort Myers	Lee	422.1	2952.9	-84.0	-4.0	84.1	267	22,702	1,482	YES
0850021	Stuart Contracting	Martin	575.2	3006.8	69.1	49.9	85.2	54	100	1,505	NO
0990045	Lake Worth Utilities	Palm Beach	592.8	2943.7	86.7	-13.2	87.7	99	7,415	1,554	YES
0990568	Lake Worth Generating	Palm Beach	592.8	2943.7	86.7	-13.2	87.7	99	54	1,554	NO
Beyond Screening Area out to 134 km [c]											
0990042	FPL - Riviera Beach	Palm Beach	594.2	2960.6	88.1	3.7	88.2	88	73,475	1,564	YES
0550018	TECO - Phillips Station	Highlands	464.3	3035.4	-41.8	78.5	88.9	332	4,053	1,579	YES
0990350	SFWMD - Pump Stn. S-9	Broward	555.9	2882.2	49.8	-74.7	89.8	146	2	1,595	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	77.0	-49.0	91.3	122	166	1,625	NO
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	77.2	-48.9	91.4	122	87	1,628	NO
0111120	Wheelabrator North Broward, Inc.	Broward	583.6	2907.6	77.5	-49.3	91.9	122	896	1,637	NO
0112515	Enron/Pompano Energy Center	Broward	583.7	2905.5	77.6	-51.4	93.1	124	166	1,662	NO
1110003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	60.7	79.4	99.9	37	1,629	1,799	YES
0250020	Tarmac - Pennsuco Cement Plant	Dade	562.9	2861.7	56.8	-95.2	110.9	149	2,792	2,017	YES
0250348	Miami-Dade Co. Resource Recovery	Miami-Dade	564.3	2857.4	58.2	-99.5	115.3	150	857	2,105	NO
0270016	DeSoto County Generating Company, LLC	DeSoto	419.8	3011.5	-86.4	54.6	102.2	302	119	1,843	NO
0112119	Wheelabrator South Broward, Inc.	Broward	578.9	2883.4	72.8	-73.5	103.4	135	461	1,869	NO
0110037	FPL - Ft. Lauderdale	Broward	579.4	2883.4	73.3	-73.5	103.8	135	47,858	1,876	YES
0610021	Ocean Spray Cranberries	Indian River	550.6	3051.3	44.5	94.4	104.4	25	48	1,887	NO
0210045	Naples Community Hospital	Collier	420.2	2892.5	-85.9	-64.4	107.4	233	39	1,947	NO
0110036	FPL - Port Everglades	Broward	587.4	2885.3	81.3	-71.6	108.3	131	170,215	1,967	YES
0550003	Progress Energy - Avon Park	Highlands	451.4	3050.5	-54.7	93.6	108.4	330	5,054	1,968	YES
0610029	City of Vero Beach Municipal Utilities	Indian River	561.4	3056.5	55.3	99.6	113.9	29	10,274	2,078	YES
0610023	New Piper Aircraft Inc.	Indian River	557.6	3058.9	51.5	102.0	114.3	27	50	2,085	NO
0610001	Community Asphalt - Vero Beach Plant	Indian River	557.0	3062.5	50.9	105.6	117.2	26	34	2,145	NO
1050019	Cargill Juice - Frostproof	Polk	447.9	3068.3	-58.2	111.4	125.7	332	173	2,314	NO
0490043	Vandolah Power Company, LLC	Hardee	408.8	3044.5	-97.4	87.6	131.0	312	197	2,419	NO

Note: deg = degrees
km = kilometers
TPY = tons per year

[a] U.S. Sugar Corporation Clewiston Mill's East and North Coordinates (km) are: 506.1 2956.9

[b] Based on North Carolina Screening Technique for annual average basis. "Dist" is the distance the facility is located from the project.
"SIA" is the significant impact area. The project's 24-hour SO_2 concentrations are assumed significant out to 4 km from the project.

[c] "Modeling Area" is the area in which the project is predicted to have a significant impact at each mill (assumed to be 4 km). EPA recommends that all sources within this area be modeled.
"Screening Area" is the distance between the U.S. Sugar Clewiston and Bryant Mills (34 km) plus the assumed significant distance of 4 km plus 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area.
"Beyond Screening Area out to 134 km" is the distance between the facilities and out to 100 km in which large sources are included in the modeling.

TABLE B-2

DETAILED SUMMARY OF STACK, OPERATING, AND EMISSIONS DATA OF FACILITIES WITH SO_2 EMISSIONS INCLUDED IN THE AAQS AND PSD CLASS II MODELING ANALYSES

AIRS Number	Facility	Units	Modeling ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack and Operating Parameters Height ft	Height m	Diameter ft	Diameter m	Temperature °F	Temperature K	Velocity ft/s	Velocity m/s	Emission Rate 3-Hour lb/hr	3-Hour g/s	24-Hour lb/hr	24-Hour g/s	PSD Source (EXP/CON)	Modeled in AAQS	Modeled in Class II
0510003	U.S. Sugar - Clewiston [b]																			
		PSD Baseline (On-crop season only)																		
		Unit 1 PSD Baseline	USSBRL1B	506.1	2956.9	75.8	23.10	6.1	1.86	160	344	99.0	30.20	-633.8	-79.86	-462.0	-58.21	EXP	No	Yes
		Unit 2 PSD Baseline	USSBLR2B	506.1	2956.9	75.8	23.10	6.1	1.86	158	343	117.0	35.70	-633.8	-79.86	-462.0	-58.21	EXP	No	Yes
		Unit 3 PSD Baseline	USSBLR3B	506.1	2956.9	90.0	27.40	7.5	2.29	156	342	48.2	14.70	-383.3	-48.30	-263.5	-33.20	EXP	No	Yes
		East Pellet Plant PSD Baseline	EPELLET	506.1	2957.0	40.0	12.20	5.0	1.52	165	347	28.0	8.54	-81.7	-10.30	-81.7	-10.30	EXP	No	Yes
		West Pellet Plant PSD Baseline	WPELLET	506.1	2957.0	51.5	15.70	5.0	1.52	165	347	28.0	8.54	-81.7	-10.30	-81.7	-10.30	EXP	No	Yes
0990061	U.S. Sugar - Bryant [a] (to be shutdown)																			
		Unit 1 PSD Baseline	USSBRY1B	537.8	2969.1	65.0	19.80	5.5	1.68	430	494	145.3	44.30	-289.7	-36.50	-289.7	-36.50	EXP	No	Yes
		Unit 2&3 PSD Baseline	USBRY23B	537.8	2969.1	65.0	19.80	5.5	1.68	160	344	124.3	37.90	-579.4	-73.00	-579.4	-73.00	EXP	No	Yes
0510015	Southern Gardens Citrus																			
		Peel Dryers 1-2	SGARDDRY	487.6	2957.6	125.0	38.10	5.7	1.74	109	316	24.4	7.45	21.0	2.65	21.0	2.65	CON	Yes	Yes
		Boilers 1-4	SGARDBLR	487.6	2957.6	55.0	16.76	4.0	1.22	400	478	46.7	14.22	5.8	0.73	5.8	0.73	CON	Yes	Yes
0990332	New Hope Power (Okeelanta)																			
		Okeelanta Power Blrs 1,2,3 [b]	OKCOGENF	524.1	2940.0	199.0	60.66	10.0	3.05	352	451	63.6	19.39	456.3	57.50	456.3	57.50	CON	Yes	Yes
0990016	Sugar Cane Growers Coop. [c]																			
		On-Crop Season																		
		Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.72	7.0	2.13	156	342	39.0	11.89	603.1	75.99	603.1	75.99	CON	Yes	Yes
		Unit 2	SCRBLR2N	534.9	2953.3	150.0	45.72	7.0	2.13	156	342	39.6	12.07	603.1	75.99	603.1	75.99	CON	Yes	Yes
		Unit 3	SCRBLR3N	534.9	2953.3	180.0	54.86	5.3	1.62	156	342	40.3	12.29	412.8	52.01	412.8	52.01	CON	No	No
		Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.86	8.9	2.71	162	345	48.0	14.63	1,031.9	130.02	1,031.9	130.02	CON	No	No
		Unit 5	SCRBLR5N	534.9	2953.3	150.0	45.72	7.0	2.13	160	344	77.1	23.51	792.8	99.89	792.8	99.89	CON	No	No
		Unit 8	SCRBLR8N	534.9	2953.3	155.0	47.24	9.5	2.90	154	341	37.6	11.46	394.4	49.69	394.4	49.69	CON	No	No
		Note: Only SCRBLR1N and SCRBLR2N were modeled due to 14 TPD limit																		
		Off-Crop Season																		
		Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.72	7.0	2.13	156	342	39.0	11.89	603.1	75.99	603.1	75.99	CON	Yes	Yes
		Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.86	8.9	2.71	162	345	48.0	14.63	1,031.9	130.02	1,031.9	130.02	CON	No	No
		Baseline																		
		Boiler No. 1 PSD Baseline Off-crop season	SCRBLR1BF	534.9	2953.3	79.1	24.11	5.5	1.68	395	475	52.3	15.94	-236.5	-29.80	-236.5	-29.80	EXP	No	Yes
		Boiler No. 2 PSD Baseline Off-crop season	SCRBLR2BF	534.9	2953.3	79.1	24.11	5.5	1.68	405	480	58.7	17.88	-236.5	-29.80	-236.5	-29.80	EXP	No	Yes
		Boiler No. 3 PSD Baseline Off-crop season	SCRBLR3BF	534.9	2953.3	79.1	24.11	5.5	1.68	470	517	54.1	16.50	-177.8	-22.40	-177.8	-22.40	EXP	No	Yes
		Boiler No. 4 PSD Baseline Off-crop season	SCRBLR4BF	534.9	2953.3	86.0	26.21	5.3	1.62	149	338	32.4	9.88	-205.6	-25.90	-205.6	-25.90	EXP	No	Yes
		Boiler No. 5 PSD Baseline Off-crop season	SCRBLR5BF	534.9	2953.3	79.1	24.11	6.7	2.03	490	528	93.2	28.42	-315.1	-39.70	-315.1	-39.70	EXP	No	Yes
		Boiler No. 6 PSD Baseline Off-crop season	SCRBLR6BF	534.9	2953.3	40.0	12.19	5.0	1.52	630	605	21.4	6.53	-147.6	-18.60	-147.6	-18.60	EXP	No	Yes
		Boiler No. 7 PSD Baseline Off-crop season	SCRBLR7BF	534.9	2953.3	40.0	12.19	5.0	1.52	630	606	56.4	17.20	-354.0	-44.60	-354.0	-44.60	EXP	No	Yes
		Boiler No. 1 PSD Baseline On-crop season	SCRBLR1BN	534.9	2953.3	79.1	24.11	5.5	1.68	395	475	52.3	15.94	-150.0	-18.90	-150.0	-18.90	EXP	No	Yes
		Boiler No. 2 PSD Baseline On-crop season	SCRBLR2BN	534.9	2953.3	79.1	24.11	5.5	1.68	405	480	58.7	17.88	-150.0	-18.90	-150.0	-18.90	EXP	No	Yes
		Boiler No. 3 PSD Baseline On-crop season	SCRBLR3BN	534.9	2953.3	79.1	24.11	5.5	1.68	470	517	54.1	16.50	-112.7	-14.20	-112.7	-14.20	EXP	No	Yes
		Boiler No. 4 PSD Baseline On-crop season	SCRBLR4BN	534.9	2953.3	86.0	26.21	5.3	1.62	149	338	32.4	9.88	-205.6	-25.90	-205.6	-25.90	EXP	No	Yes
		Boiler No. 5 PSD Baseline On-crop season	SCRBLR5BN	534.9	2953.3	79.1	24.11	6.7	2.03	490	528	93.2	28.42	0.0	0.00	0.0	0.00	EXP	No	Yes
		Boiler No. 6 PSD Baseline On-crop season	SCRBLR6BN	534.9	2953.3	40.0	12.19	5.0	1.52	630	605	21.4	6.53	0.0	0.00	0.0	0.00	EXP	No	Yes
		Boiler No. 7 PSD Baseline On-crop season	SCRBLR7BN	534.9	2953.3	40.0	12.19	5.0	1.52	630	606	56.4	17.20	-121.4	-15.30	-121.4	-15.30	EXP	No	Yes

TABLE B-2

DETAILED SUMMARY OF STACK, OPERATING, AND EMISSIONS DATA OF FACILITIES WITH SO_2 EMISSIONS INCLUDED IN THE AAQS AND PSD CLASS II MODELING ANALYSES

AIRS Number	Facility	Units	Modeling ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack and Operating Parameters: Height ft	Height m	Diameter ft	Diameter m	Temperature °F	Temperature K	Velocity ft/s	Velocity m/s	Emission Rate 3-Hour lb/hr	3-Hour g/s	24-Hour lb/hr	24-Hour g/s	PSD Source (EXP/CON)	Modeled in AAQS	Modeled in Class II
0990019	Osceola Farms [a]																			
		Unit 2a,b	OSBLR2AB	544.2	2968.0	90.0	27.43	5.0	1.52	148	338	36.5	11.13	228.9	28.84	228.9	28.84	CON	Yes	Yes
		Unit 3	OSBLR3	544.2	2968.0	90.0	27.43	6.3	1.91	148	338	36.5	11.13	229.2	28.88	229.2	28.88	CON	Yes	Yes
		Unit 4	OSBLR4	544.2	2968.0	90.0	27.43	6.0	1.83	154	341	54.2	16.52	228.9	28.84	228.9	28.84	CON	Yes	Yes
		Unit 5a	OSBLR5A	544.2	2968.0	90.0	27.43	5.0	1.52	150	339	56.9	17.35	115.9	14.60	115.9	14.60	CON	Yes	Yes
		Unit 5b	OSBLR5B	544.2	2968.0	90.0	27.43	5.0	1.52	150	339	46.7	14.24	115.9	14.60	115.9	14.60	CON	Yes	Yes
		Unit 6	OSBLR6	544.2	2968.0	90.0	27.43	6.2	1.88	151	339	53.0	16.16	250.1	31.51	250.1	31.51	CON	Yes	Yes
		Unit 1 PSD Baseline	OSBLR1B	544.2	2968.0	72.2	22.01	5.0	1.52	156	342	59.6	18.18	-40.2	-5.07	-40.2	-5.07	EXP	No	Yes
		Unit 2 PSD Baseline	OSBLR2B	544.2	2968.0	72.2	22.01	5.0	1.52	154	341	59.4	18.10	-129.5	-16.32	-129.5	-16.32	EXP	No	Yes
		Unit 3 PSD Baseline	OSBLR3B	544.2	2968.0	72.2	22.01	6.3	1.93	154	341	47.6	14.50	-57.6	-7.26	-57.6	-7.26	EXP	No	Yes
		Unit 4 PSD Baseline	OSBLR4B	544.2	2968.0	72.2	22.01	6.0	1.83	154	341	61.7	18.80	-108.0	-13.61	-108.0	-13.61	EXP	No	Yes
0990016	Atlantic Sugar Association [a]																			
		Unit 1	ATLSUG1	552.9	2945.2	90.0	27.43	6.0	1.83	180	355	61.1	18.63	129.2	16.28	129.2	16.28	CON	Yes	Yes
		Unit 2	ATLSUG2	552.9	2945.2	90.0	27.43	6.0	1.83	180	355	60.1	18.32	129.2	16.28	129.2	16.28	CON	Yes	Yes
		Unit 3	ATLSUG3	552.9	2945.2	90.0	27.43	6.0	1.83	197	365	59.7	18.20	127.1	16.02	127.1	16.02	CON	Yes	Yes
		Unit 4	ATLSUG4	552.9	2945.2	90.0	27.43	6.0	1.83	158	343	62.7	19.12	128.7	16.21	128.7	16.21	CON	Yes	Yes
		Unit 5 PSD [b]	ATLSUG5	552.9	2945.2	90.0	27.43	5.5	1.68	150	339	53.3	16.25	66.7	8.41	63.8	8.04	CON	Yes	Yes
		Unit 1 PSD Baseline	ATLSUG1B	552.9	2945.2	62.0	18.90	6.3	1.92	451	506	41.7	12.70	-136.8	-17.24	-136.8	-17.24	EXP	No	Yes
		Unit 2 PSD Baseline	ATLSUG2B	552.9	2945.2	62.0	18.90	6.3	1.92	460	511	35.8	10.90	-178.6	-22.50	-178.6	-22.50	EXP	No	Yes
		Unit 3 PSD Baseline	ATLSUG3B	552.9	2945.2	71.8	21.88	6.0	1.83	480	522	57.4	17.50	-134.0	-16.88	-134.0	-16.88	EXP	No	Yes
		Unit 4 PSD Baseline	ATLSUG4B	552.9	2945.2	60.0	18.29	6.0	1.83	160	344	49.2	15.00	-85.4	-10.76	-85.4	-10.76	EXP	No	Yes
0990021	United Technologies Corp. (Pratt & Whitney Aircraft)																			
		Air Compressor/Heater (ACHR-2-B2)	PRATACHR	562.0	2960.0	50.0	15.24	3.0	0.91	1000	811	471.6	143.73	111.0	13.99	111.0	13.99	CON	No	Yes
		Boiler BO-12, -1, -2, -14	PRATBO12	562.0	2960.0	15.0	4.57	2.5	0.76	500	533	22.7	6.92	0.1	0.01	0.1	0.01	CON	No	Yes
0990234	Palm Beach County Resource Recovery																			
		Units 1 and 2	PBCRRF	585.8	2960.2	249.9	76.20	6.7	2.04	450	505	81.7	24.90	91.6	11.55	91.6	11.55	CON	Yes	Yes
0850001	FPL - Martin																			
		Units 1&2	MART12	543.1	2992.9	499.0	152.10	26.2	7.99	338	443	69.0	21.03	13,839.6	1,743.79	13,839.6	1,743.79	NO	Yes	No
		Units 3&4	MART34	543.1	2992.9	213.0	64.92	20.0	6.10	280	411	62.0	18.90	3,733.3	470.40	3,733.3	470.40	CON	Yes	Yes
		Aux Boiler	MARTAUX	543.1	2992.9	60.0	18.29	3.6	1.10	504	535	50.0	15.24	102.4	12.90	102.4	12.90	CON	Yes	Yes
		Diesel Generator	MARTGEN	543.1	2992.9	25.0	7.62	1.0	0.30	955	786	130.0	39.62	4.0	0.51	4.0	0.51	CON	Yes	Yes
		Unit 8 (EUs 11, 12, 17, 18)	MART8OIL	543.1	2992.9	120.0	36.58	19.0	5.79	296	420	73.5	22.40	412.4	51.96	412.4	51.96	CON	Yes	Yes
0850102	Indiantown Cogeneration L.P.																			
		Polverized Coal Main Boiler	INDTOWN1	545.6	2990.7	495.0	150.88	16.0	4.88	140	333	93.2	28.41	582.0	73.30	581.7	73.30	CON	Yes	Yes
		Auxiliary and Temporary Boilers	INDTOWN3	545.6	2990.7	210.0	64.01	5.0	1.52	350	450	87.6	26.70	18.0	2.30	18.3	2.30	CON	Yes	Yes
0110037	FPL - Ft. Lauderdale																			
		CTs 1-4 PSD	LAUDU45	580.1	2883.3	150.0	45.72	18.0	5.49	330	439	47.9	14.60	2,152.0	271.15	2,152.0	271.15	CON	Yes	Yes
		4&5 PSD Baseline	FTLAU45B	580.1	2883.3	151.0	46.02	14.0	4.27	300	422	48.0	14.63	-3,627.0	-457.00	-3,627.0	-457.00	EXP	No	Yes
		GT 1-12 (0.5%S Fuel Oil)	LDGT1_12	580.1	2883.3	44.9	13.69	7.8	2.38	860	733	374.9	114.30	4,387.3	552.80	4,387.3	552.80	NO	Yes	No
		GT 13-24 (0.5%S Fuel Oil)	LDGT1324	580.1	2883.3	44.0	13.41	15.6	4.76	860	733	93.3	28.45	4,387.3	552.80	4,387.3	552.80	NO	Yes	No
0710000	FPL - Fort Myers																			
		Unit 1 PSD Baseline	FMU1B	422.1	2952.9	301.2	91.80	9.5	2.90	300	422	98.1	29.90	-4,646.8	-585.50	-4,646.8	-585.50	EXP	No	Yes
		Unit 2 PSD Baseline	FMU2B	422.1	2952.9	397.6	121.20	18.1	5.52	275	408	63.0	19.20	-10,587.3	-1,334.00	-10,587.3	-1,334.00	EXP	No	Yes
		HRSGs 1-6	FMYHR1_6	422.1	2952.9	125.0	38.10	19.0	5.79	220	378	46.6	14.20	30.6	3.86	30.6	3.86	CON	Yes	Yes
		Combustion Turbines 1-12	FMYCT112	422.1	2952.9	32.0	9.75	11.4	3.47	975	797	189.4	57.73	4,800.0	604.80	4,800.0	604.80	NO	Yes	No
		CTs 3A-3B	FMYCT3	422.1	2952.9	80.0	24.38	20.5	6.25	1116	875	120.7	36.79	206.2	25.98	206.2	25.98	CON	Yes	Yes
0990068	Lake Worth Utilities																			
		Unit 3, S-3	LAKWTHU3	592.8	2943.7	112.9	34.40	7.0	2.13	293	418	51.5	15.70	799.2	100.70	799.2	100.70	NO	Yes	No
		Unit 4, S-4	LAKWTHU4	592.8	2943.7	115.2	35.10	7.5	2.29	293	418	55.8	17.00	1,030.6	129.85	1,030.6	129.85	NO	Yes	No

TABLE B-2

DETAILED SUMMARY OF STACK, OPERATING, AND EMISSIONS DATA OF FACILITIES WITH SO_2 EMISSIONS INCLUDED IN THE AAQS AND PSD CLASS II MODELING ANALYSES

AIRS Number	Facility Units	Modeling ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack and Operating Parameters: Height ft	Height m	Diameter ft	Diameter m	Temperature °F	Temperature K	Velocity ft/s	Velocity m/s	Emission Rate: 3-Hour lb/hr	3-Hour g/s	24-Hour lb/hr	24-Hour g/s	PSD Source (EXP/CON)	Modeled in AAQS	Modeled in Class II
0990042	FPL - Riviera																		
	Units 3&4 at 2.5% S Fuel Oil	RIVU34	594.2	2960.6	297.9	90.80	16.0	4.88	263	402	62.0	18.90	16,775.0	2,113.65	16,775.0	2,113.65	NO	Yes	No
0550018	TECO - Phillips Station																		
	Diesel Generating Unit 1	TECOPH1	464.3	3035.4	150.0	45.73	6.0	1.83	335	441	79.0	24.09	460.0	57.96	460.0	57.96	CON	Yes	Yes
	Diesel Generating Unit 2	TECOPH2	464.3	3035.4	150.0	45.73	6.0	1.83	350	450	79.0	24.09	460.0	57.96	460.0	57.96	CON	Yes	Yes
1110003	Fort Pierce Utilities																		
	Diesel Units 1&2	FPUD12	566.8	3036.3	23.0	7.01	3.0	0.91	950	783	39.0	11.89	30.0	3.78	30.0	3.78	CON	Yes	Yes
	CCGT Unit # 9	FPUCCGT9	566.8	3036.3	68.0	20.73	11.2	3.41	426	492	59.8	18.23	319.5	40.26	319.5	40.26	CON	Yes	Yes
	Boiler Unit #6	FPUB6	566.8	3036.3	148.0	45.12	5.0	1.52	325	436	36.0	10.98	2.5	0.32	2.5	0.32	CON	Yes	Yes
	Boiler Unit #7 (Phase II Acid Rain Unit)	FPUB7	566.8	3036.3	147.0	44.82	7.1	2.16	308	426	61.1	18.63	2.5	0.32	2.5	0.32	CON	Yes	Yes
	Boiler Unit #8 (Phase II Acid Rain Unit)	FPUB8	566.8	3036.3	150.0	45.73	8.0	2.44	334	441	83.6	25.49	2.5	0.32	2.5	0.32	CON	Yes	Yes
0250020	Tarmac - Pennsuco Cement Plant																		
	Kiln 1 PSD Baseline	TARMK1B	562.9	2861.7	200.1	61.00	8.0	2.44	377	465	42.1	12.84	-45.3	-5.71	-45.3	-5.71	EXP	Yes	Yes
	Kiln 2 PSD Baseline	TARMK2B	562.9	2861.7	200.1	61.00	8.0	2.44	377	465	42.1	12.84	-45.3	-5.71	-45.3	-5.71	EXP	Yes	Yes
	Kiln 3 PSD Baseline	TARMK3B	562.9	2861.7	200.1	61.00	15.0	4.57	390	472	35.4	10.78	-21.9	-2.76	-21.9	-2.76	EXP	Yes	Yes
	Raw Mill & Pyroprocessing	TARMKRMP	562.9	2861.7	420.0	128.05	14.0	4.27	294	419	55.8	17.00	320.0	40.32	320.0	40.32	CON	Yes	Yes
0610029	City of Vero Beach Municipal Utilities																		
	Unit 1	VERBU1	567.1	3056.5	200.0	60.96	3.5	1.07	327	437	106.4	32.42	228.3	28.77	228.3	28.77	NO	Yes	No
	Unit 2	VERBU2	567.1	3056.5	200.0	60.96	3.5	1.07	322	434	123.3	37.57	668.3	84.21	668.3	84.21	NO	Yes	No
	Unit 3	VERBU3	567.1	3056.5	200.0	60.96	6.0	1.83	333	440	65.4	19.93	1,127.5	142.07	1,127.5	142.07	NO	Yes	No
	Unit 4	VERBU4	567.1	3056.5	200.0	60.96	7.0	2.13	306	425	79.9	24.36	548.0	69.05	548.0	69.05	NO	Yes	No
	Unit 5 Simple Cycle CT	VERBU5	567.1	3056.5	125.0	38.10	11.0	3.35	290	416	64.2	19.56	123.0	15.50	123.0	15.50	CON	Yes	Yes
0110036	FPL - Port Everglades																		
	Units 1&2 at 2.5%S Fuel Oil	PTEVU12	587.4	2885.3	342.8	104.50	14.0	4.27	289	416	87.7	26.72	12,650.0	1,593.90	12,650.0	1,593.90	NO	Yes	No
	Units 3&4 at 2.5%S Fuel Oil	PTEVU34	587.4	2885.3	342.8	104.50	18.1	5.52	287	415	78.3	23.88	22,000.0	2,772.00	22,000.0	2,772.00	NO	Yes	No
	GT 1-12 (0.5%S Fuel Oil)	PTEVGTS	587.4	2885.3	44.0	13.40	15.6	4.75	860	733	93.3	28.43	4,211.9	530.70	4,211.9	530.70	NO	Yes	No
0550003	Progress Energy - Avon Park																		
	Gas Turbine Peaking Unit No. 1	PEAVON3	451.4	3050.5	55.0	16.76	10.0	3.05	850	728	424.4	129.36	577.0	72.70	577.0	72.70	NO	Yes	No
	Gas Turbine Peaking Unit No. 2	PEAVON4	451.4	3050.5	55.0	16.76	10.0	3.05	850	728	424.4	129.36	577.0	72.70	577.0	72.70	NO	Yes	No

[a] Facilities or sources within facilities that operate only during the October 1 through April 30 crop season.

[b] Sugar mill sources that operate all year.

[c] Represents worst case emissions for May 1-September 30 off-crop season operation, and October 1-April 30 for on-crop season.

Note:
EXP = PSD expanding source
CON = PSD consuming source
NO = source does not affect PSD increment
ND = no data available

TABLE B-3
SUMMARY OF THE PM FACILITIES CONSIDERED FOR INCLUSION IN THE PSD CLASS II AIR MODELING ANAYSES

AIRS Number	Facility	County	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to U.S. Sugar Clewiston Mill [a] X (km)	Y (km)	Distance (km)	Direction (deg)	Maximum PM Emissions (TPY)	Q, (TPY) Emission Threshold [b,c] (Dist - SID) x 20	Include in Modeling Analysis ?
Modeling Area [d]											
0510003	U.S. Sugar - Clewiston	Hendry	506.1	2956.9	0.0	0.0	0.0	NA	1,780	SIA	YES
0990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	31.7	12.2	34.0	69	1,104	600	YES
Screening Area [d]											
7775172	Better Roads Inc., Alico Road Asphalt Plant	Glades	492.0	2966.0	-14.1	9.1	16.8	303	22	256	NO
0510022	Fiberstar, Inc.	Hendry	487.7	2957.7	-18.4	0.8	18.4	272	91	289	NO
0510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-18.5	0.7	18.5	272	82	290	NO
0990005	Okeelanta Corp.	Palm Beach	525.0	2937.4	18.9	-19.5	27.2	136	34	463	YES
0990332	New Hope Power (Okeelanta)	Palm Beach	524.9	2939.4	18.8	-17.5	25.7	133	269	433	YES
0990026	Sugar Cane Growers Cooperative	Palm Beach	534.9	2953.3	28.8	-3.6	29.0	97	1,769	500	YES
0990019	Osceola Farms	Palm Beach	544.2	2968.0	38.1	11.1	39.7	74	617	714	YES
0110351	SFWMD - Pump Stations S-8/G-404	Broward	522.3	2912.3	16.2	-44.6	47.5	160	23	869	NO
0990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	46.8	-11.7	48.2	104	763	885	YES
0510004	A. Duda & Sons, Inc.- Citrus Belle	Hendry	456.4	2950.3	-49.7	-6.6	50.1	262	21	923	NO
0850001	FPL - Martin	Martin	543.1	2992.9	37.0	36.0	51.6	46	8,580	952	YES
0850102	Indiantown Cogeneration L.P.	Martin	545.6	2991.5	39.5	34.6	52.5	49	271	970	NO
0850012	Bay State Milling Co.	Martin	547.4	2991.7	41.3	34.8	54.0	50	94	1,000	NO
0850002	Louis Dreyfus Citrus, Inc. - Indiantown Plant	Martin	548.0	2991.5	41.9	34.6	54.3	50	172	1,006	NO
0990021	United Technologies Corp. (Pratt & Whitney Aircraft)	Palm Beach	562.0	2960.0	55.9	3.1	56.0	87	121	1,040	NO
0990348	Palm Beach Aggregates, Inc.	Palm Beach	563.0	2952.0	56.9	-4.9	57.1	95	83	1,062	NO
7775215	Daniel P. Mays - Church Road Site	Hendry	445.8	2934.5	-60.3	-22.4	64.3	250	44	1,206	NO
0550005	Georgia Pacific Corporation	Highlands	467.0	3009.2	-39.1	52.3	65.3	323	21	1,227	NO
0550014	Better Roads, Inc. - Lake Placid Asphalt Plant	Highlands	465.6	3008.7	-40.5	51.8	65.8	322	18	1,235	NO
0990087	Ranger Construction Industries, Inc. - West Palm Plant	Palm Beach	579.9	2951.7	73.8	-5.2	74.0	94	22	1,400	NO
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	44.8	61.2	75.8	36	61	1,437	NO
0990310	Community Asphalt Corp. / West Palm Beach Plant	Palm Beach	582.3	2950.8	76.2	-6.1	76.4	95	128	1,449	NO
0990234	Palm Beach County Resource Recovery	Palm Beach	585.8	2960.2	79.7	3.3	79.8	88	143	1,515	NO
0710187	Oldcastle Materials, Inc. - Lee County Drum Mix Asphalt Plant	Lee	428.0	2930.4	-78.1	-26.5	82.5	251	24	1,569	NO
0710119	Lee County Resource Recovery	Lee	424.2	2945.7	-81.9	-11.2	82.7	262	52	1,573	NO
0710126	Rinker Materials Corp. - Ft. Meyers Mine	Lee	427.0	2931.0	-79.1	-25.9	83.2	252	54	1,585	NO
0150028	Ajax Paving Industries - Tuckers Corner	Charlotte	422.7	2963.9	-83.4	7.0	83.7	275	29	1,594	NO
0710002	FPL - Fort Myers	Lee	422.1	2952.9	-84.0	-4.0	84.1	267	3,078	1,602	YES
Beyond Screening Area out to 134 km [d]											
0990042	FPL - Riviera Beach	Palm Beach	594.2	2960.6	88.1	3.7	88.2	88	2,856	1,684	YES
0550018	TECO - Phillips Station	Highlands	464.3	3035.4	-41.8	78.5	88.9	332	143	1,699	NO
1110004	Tropicana Products, Inc.	St. Lucie	559.6	3028.3	53.5	71.4	89.2	37	175	1,705	NO
0550032	Turf Care Supply Corp. Erieview TWR - Sebring Plant	Highlands	469.5	3038.4	-36.6	81.5	89.3	336	95	1,707	NO
0550006	Genpak LLC	Highlands	464.8	3036.8	-41.3	79.9	90.0	333	108	1,719	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	77.0	-49.0	91.3	122	55	1,745	NO
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	77.2	-48.9	91.4	122	227	1,748	NO
7775296	Pro Disposal Inc. - Supply Drive	Lee	418.1	2930.9	-88.0	-26.0	91.7	254	30	1,755	NO
0112120	Wheelabrator North Broward, Inc.	Broward	583.6	2907.6	77.5	-49.3	91.9	122	97	1,757	NO
0710004	Gulf Paving Co.	Lee	415.2	2944.1	-90.9	-12.8	91.8	262	71	1,756	NO

TABLE B-3
SUMMARY OF THE PM FACILITIES CONSIDERED FOR INCLUSION IN THE PSD CLASS II AIR MODELING ANAYSES

AIRS Number	Facility	County	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to U.S. Sugar Clewiston Mill [a] X (km)	Y (km)	Distance (km)	Direction (deg)	Maximum PM Emissions (TPY)	Q, (TPY) Emission Threshold [b,c] (Dist - SID) x 20	Include in Modeling Analysis ?
1110040	Ranger Construction Industries, Inc. - Ranger/Ft. Pierce	St. Lucie	561.7	3030.2	55.6	73.3	92.0	37	41	1,759	NO
0710236	Bonita Springs Utilities, Inc. - East Water Reclamation Facility	Lee	424.1	2915.0	-82.0	-41.9	92.1	243	25	1,762	NO
7770060	Ajax Paving Industries Inc. of Florida	Lee	417.7	2930.8	-88.4	-26.1	92.1	254	24	1,763	NO
1110010	Dickerson Florida, Inc. - Dickerson/Asphalt Plant #14	St. Lucie	562.2	3030.4	56.1	73.5	92.5	37	54	1,769	NO
0710171	Amerimix Industries, Inc. - Ft. Myers Sand/Cement Blending & Bagging	Lee	415.5	2931.0	-90.6	-25.9	94.2	254	18	1,804	NO
0210023	Oldcastle Materials, Inc. - Collier County Asphalt Concrete Plant	Collier	429.2	2898.8	-76.9	-58.1	96.4	233	43	1,848	NO
1110003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	60.7	79.4	99.9	37	218	1,919	NO
0110036	FPL - Port Everglades	Broward	587.4	2885.3	81.3	-71.6	108.3	131	4,558	2,087	YES
0250020	Tarmac - Pennsuco Cement Plant	Miami-Dade	562.9	2861.7	56.8	-95.2	110.9	149	910	2,137	NO
0250348	Miami-Dade Resource Recovery	Miami-Dade	564.3	2857.4	58.2	-99.5	115.3	150	116	2,225	NO
0150078	Southwest Land Developers, Inc.	Charlotte	405.9	2964.4	-100.2	7.5	100.5	274	47	1,929	NO
0270016	DeSoto County Generating Company, LLC	DeSoto	419.8	3011.5	-86.4	54.6	102.2	302	57	1,963	NO
0112119	Wheelabrator South Broward, Inc.	Broward	578.9	2883.4	72.8	-73.5	103.4	135	103	1,989	NO
0110037	FPL - Ft. Lauderdale	Broward	579.4	2883.4	73.3	-73.5	103.8	135	754	1,996	NO
0610021	Ocean Spray Cranberries	Indian River	550.6	3051.3	44.5	94.4	104.4	25	39	2,007	NO
0150002	Asphalt Developers	Charlotte	400.7	2977.6	-105.4	20.7	107.4	281	55	2,068	NO
0550012	Apac-Southeast Inc., Central FL Division - Lake Wales Branch Plant #0410	Highlands	451.1	3050.0	-55.0	93.1	108.1	329	56	2,082	NO
0270003	Peace River Citrus Products	DeSoto	409.8	3010.1	-96.3	53.2	110.0	299	45	2,120	NO
0112598	Hollywood Woodwork, Inc.	Broward	582.6	2875.5	76.5	-81.4	111.7	137	99	2,154	NO
0550035	Cargill Juice - Avon Park	Highlands	448.3	3057.6	-57.8	100.7	116.1	330	52	2,242	NO
1050019	Cargill Juice - Frostproof	Polk	447.9	3068.3	-58.2	111.4	125.7	332	239	2,434	NO
0490043	Vandolah Power Company, LLC	Hardee	408.8	3044.5	-97.4	87.6	131.0	312	114	2,539	NO

Note: NA = Not applicable, ND = No data, SID = Significant impact distance for the project

[a] U.S. Sugar Clewiston Mill's East and North Coordinates (km) are: 506.1 2956.9

[b] The significant impact distance for the project is estimated to be: 4 km

[c] Based on the North Carolina Screening Threshold method, a background facility is included in the modeling analysis if the facility is beyond the modeling area and its emission rate is greater than the product of (Distance-SID) x 20.

[d] "Modeling Area" is the area in which the project is predicted to have a significant impact at each mill (assumed to be 4 km). EPA recommends that all sources within this area be modeled. "Screening Area" is the distance between the U.S. Sugar Clewiston and Bryant Mills (34 km) plus the assumed significant distance of 4 km plus 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area. "Beyond Screening Area out to 134 km" is the distance between the facilities and out to 100 km in which large sources are included in the modeling.

TABLE B-4
SUMMARY OF THE STACK, OPERATING, AND PM_{10} EMISSIONS FOR THE BACKGROUND FACILITIES INCLUDED IN THE PSD CLASS II AIR MODELING ANALYSES

AIRS Number	Facility	Units	ISCST3 ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack Parameters Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	Emission Rate 24-hr (lb/hr)	Emission Rate 24-hr (g/s)	PSD Source? (EXP/CON)	Modeled in AAQS	Modeled in Class II
0510003	U.S. Sugar - Clewiston [c]																	
		PSD Baseline (On-crop season only)																
		Unit 1 PSD Baseline	USSBRL1B	506.1	2956.9	75.8	23.1	6.1	1.86	160	344.0	99.1	30.20	-59.37	-7.48	EXP	No	Yes
		Unit 2 PSD Baseline	USSBLR2B	506.1	2956.9	75.8	23.1	6.1	1.86	158	343.0	117.1	35.70	-55.87	-7.04	EXP	No	Yes
		Unit 3 PSD Baseline	USSBLR3B	506.1	2956.9	90.0	27.4	7.5	2.29	156	342.0	48.2	14.70	-28.50	-3.59	EXP	No	Yes
		East Pellet Plant PSD Baseline	EPELLET	506.1	2956.9	40.0	12.2	5.0	1.52	165	347.0	28.0	8.54	-13.41	-1.69	EXP	No	Yes
		West Pellet Plant PSD Baseline	WPELLET	506.1	2956.9	51.5	15.7	5.0	1.52	165	347.0	28.0	8.54	-6.51	-0.82	EXP	No	Yes
0990061	U.S. Sugar - Bryant [b] (to be shutdown)																	
		Unit 1 PSD Baseline	USSBRY1B	537.8	2969.1	65.0	19.8	5.5	1.68	430	494.0	145.3	44.30	-653.97	-82.40	EXP	No	Yes
		Unit 2&3 PSD Baseline	USBRY23B	537.8	2969.1	65.0	19.8	5.5	1.68	160	344.0	124.3	37.90	-95.56	-12.04	EXP	No	Yes
0990332	New Hope Power (Okeelanta)																	
		Okeelanta Power Blrs 1,2,3 [c]	OKCOGENF	524.1	2940.0	199.0	60.7	10.0	3.05	352	450.9	63.6	19.39	64.50	8.13	CON	Yes	Yes
0990005	Okeelanta Corp. [b]																	
		Boiler No. 16 [c]	OKBLR16	525.0	2937.4	75.0	22.9	5.0	1.52	410	483.0	74.9	22.83	6.10	0.77	CON	Yes	Yes
		Boiler No. 4 PSD Baseline	OKBLR4B	525.0	2937.4	75.0	22.9	7.5	2.29	140	333.0	24.1	7.36	-55.32	-6.97	EXP	No	Yes
		Boiler No. 5 PSD Baseline	OKBLR5B	525.0	2937.4	75.0	22.9	7.5	2.29	140	333.0	39.6	12.07	-70.79	-8.92	EXP	No	Yes
		Boiler No. 6 PSD Baseline	OKBLR6B	525.0	2937.4	75.0	22.9	7.5	2.29	142	334.0	28.7	8.74	-77.70	-9.79	EXP	No	Yes
		Boiler No. 10 PSD Baseline	OKBLR10B	525.0	2937.4	75.0	22.9	7.5	2.29	142	334.0	33.9	10.35	-85.32	-10.75	EXP	No	Yes
		Boiler No. 11 PSD Baseline	OKBLR11B	525.0	2937.4	75.0	22.9	7.5	2.29	156	342.0	32.4	9.89	-83.57	-10.53	EXP	No	Yes
0990026	Sugar Cane Growers Coop. [a]																	
		On-crop season																
		Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.7	7.0	2.13	156	342	39.0	11.89	66.70	8.40	CON	Yes	Yes
		Unit 2	SCRBLR2N	534.9	2953.3	150.0	45.7	7.0	2.13	156	342	39.6	12.07	66.00	8.32	CON	Yes	Yes
		Unit 3	SCRBLR3N	534.9	2953.3	180.0	54.9	5.3	1.62	156	342	40.3	12.30	52.50	6.62	CON	No	Yes
		Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.9	8.9	2.72	162	345	48.0	14.63	114.50	14.43	CON	No	Yes
		Unit 5	SCRBLR5N	534.9	2953.3	150.0	45.7	7.0	2.13	160	344	77.1	23.50	109.80	13.83	CON	No	Yes
		Unit 8	SCRBLR8N	534.9	2953.3	155.0	47.3	9.5	2.90	154	341	37.6	11.47	75.60	9.53	CON	No	Yes
		Off-crop season																
		Unit 1		534.9	2953.3	150.0	45.7	7.0	2.13	156	342	39.0	11.88	66.70	8.40	CON	Yes	Yes
		Unit 4	SCRBLR1N SCRBLR4N	534.9	2953.3	180.0	54.9	8.9	2.72	162	345	48.0	14.64	114.50	14.43	CON	Yes	Yes
		Baseline																
		Boiler No. 1 PSD Baseline Off-crop season	SCRBLR1BF	534.9	2953.3	79.1	24.1	5.5	1.68	395	475	52.3	15.95	-64.50	-8.10	EXP	No	Yes
		Boiler No. 2 PSD Baseline Off-crop season	SCRBLR2BF	534.9	2953.3	79.1	24.1	5.5	1.68	405	480	58.7	17.90	-113.20	-14.30	EXP	No	Yes
		Boiler No. 3 PSD Baseline Off-crop season	SCRBLR3BF	534.9	2953.3	79.1	24.1	5.5	1.68	470	517	54.1	16.49	0.00	0.00	EXP	No	Yes
		Boiler No. 4 PSD Baseline Off-crop season	SCRBLR4BF	534.9	2953.3	86.0	26.2	5.3	1.62	149	338	32.4	9.88	-68.10	-8.60	EXP	No	Yes
		Boiler No. 5 PSD Baseline Off-crop season	SCRBLR5BF	534.9	2953.3	79.1	24.1	6.7	2.03	490	528	93.2	28.41	-164.60	-20.70	EXP	No	Yes
		Boiler No. 6 PSD Baseline Off-crop season	SCRBLR6BF	534.9	2953.3	40.0	12.2	5.0	1.52	630	605	21.4	6.52	0.00	0.00	EXP	No	Yes
		Boiler No. 7 PSD Baseline Off-crop season	SCRBLR7BF	534.9	2953.3	40.0	12.2	5.0	1.52	630	606	56.4	17.20	0.00	0.00	EXP	No	Yes
		Boiler No. 1 PSD Baseline On-crop season	SCRBLR1BN	534.9	2953.3	79.1	24.1	5.5	1.68	395	475	52.3	15.95	-95.60	-12.00	EXP	No	Yes
		Boiler No. 2 PSD Baseline On-crop season	SCRBLR2BN	534.9	2953.3	79.1	24.1	5.5	1.68	405	480	58.7	17.90	-174.50	-22.00	EXP	No	Yes
		Boiler No. 3 PSD Baseline On-crop season	SCRBLR3BN	534.9	2953.3	79.1	24.1	5.5	1.68	470	517	54.1	16.49	-86.90	-11.00	EXP	No	Yes
		Boiler No. 4 PSD Baseline On-crop season	SCRBLR4BN	534.9	2953.3	86.0	26.2	5.3	1.62	149	338	32.4	9.88	-68.10	-8.60	EXP	No	Yes
		Boiler No. 5 PSD Baseline On-crop season	SCRBLR5BN	534.9	2953.3	79.1	24.1	6.7	2.03	490	528	93.2	28.41	-117.40	-14.80	EXP	No	Yes
		Boiler No. 6 PSD Baseline On-crop season	SCRBLR6BN	534.9	2953.3	40.0	12.2	5.0	1.52	630	605	21.4	6.52	-3.70	-0.50	EXP	No	Yes
		Boiler No. 7 PSD Baseline On-crop season	SCRBLR7BN	534.9	2953.3	40.0	12.2	5.0	1.52	630	606	56.4	17.20	-8.80	-1.10	EXP	No	Yes

TABLE B-4
SUMMARY OF THE STACK, OPERATING, AND PM_{10} EMISSIONS FOR THE BACKGROUND FACILITIES INCLUDED IN THE PSD CLASS II AIR MODELING ANALYSES

AIRS			ISCST3	UTM Coordinates		Stack Parameters								Emission Rate		PSD Source?	Modeled in	
						Height		Diameter		Temperature		Velocity		24-hr				
Number	Facility	Units	ID Name	East (km)	North (km)	(ft)	(m)	(ft)	(m)	(°F)	(K)	(ft/s)	(m/s)	(lb/hr)	(g/s)	(EXP/CON)	AAQS	Class II
0990019	Osceola Farms [b]																	
		Unit 2a,b	OSBLR2AB	544.2	2968.0	90.0	27.4	5.0	1.52	148	337.6	36.5	11.13	56.00	7.06	CON	Yes	Yes
		Unit 3	OSBLR3	544.2	2968.0	90.0	27.4	6.3	1.91	148	337.6	36.5	11.13	58.40	7.36	CON	Yes	Yes
		Unit 4	OSBLR4	544.2	2968.0	90.0	27.4	6.0	1.83	154	340.7	54.2	16.52	84.00	10.58	CON	Yes	Yes
		Unit 5a	OSBLR5A	544.2	2968.0	90.0	27.4	5.0	1.52	150	338.7	56.9	17.35	36.25	4.57	CON	Yes	Yes
		Unit 5b	OSBLR5B	544.2	2968.0	90.0	27.4	5.0	1.52	150	338.7	46.7	14.24	29.75	3.75	CON	Yes	Yes
		Unit 6	OSBLR6	544.2	2968.0	90.0	27.4	6.2	1.88	151	339.3	53.0	16.16	56.90	7.17	CON	Yes	Yes
		Unit 1 PSD Baseline	OSBLR1B	544.2	2968.0	72.2	22.0	5.0	1.52	156	342.0	59.6	18.17	-116.98	-14.74	EXP	No	Yes
		Unit 2 PSD Baseline	OSBLR2B	544.2	2968.0	72.2	22.0	5.0	1.52	154	341.0	59.4	18.10	-141.98	-17.89	EXP	No	Yes
		Unit 3 PSD Baseline	OSBLR3B	544.2	2968.0	72.2	22.0	6.3	1.92	154	341.0	47.6	14.50	-73.97	-9.32	EXP	No	Yes
		Unit 4 PSD Baseline	OSBLR4B	544.2	2968.0	72.2	22.0	6.0	1.83	154	341.0	61.7	18.80	-73.41	-9.25	EXP	No	Yes
0990016	Atlantic Sugar Association [b]																	
		Unit 1	ATLSUG1	552.9	2945.2	90.0	27.4	6.0	1.83	180	355.4	61.1	18.63	83.97	10.58	CON	Yes	Yes
		Unit 2	ATLSUG2	552.9	2945.2	90.0	27.4	6.0	1.83	180	355.4	60.1	18.32	83.97	10.58	CON	Yes	Yes
		Unit 3	ATLSUG3	552.9	2945.2	90.0	27.4	6.0	1.83	197	364.8	59.7	18.20	78.02	9.83	CON	Yes	Yes
		Unit 4	ATLSUG4	552.9	2945.2	90.0	27.4	6.0	1.83	158	343.2	62.7	19.12	73.70	9.29	CON	Yes	Yes
		Unit 5 PSD [c]	ATLSUG5	552.9	2945.2	90.0	27.4	5.5	1.68	150	338.7	53.3	16.25	35.71	4.50	CON	Yes	Yes
		Unit 1 PSD Baseline	ATLSUG1B	552.9	2945.2	62.0	18.9	6.3	1.92	451	506.0	41.7	12.70	-116.98	-14.74	EXP	No	Yes
		Unit 2 PSD Baseline	ATLSUG2B	552.9	2945.2	62.0	18.9	6.3	1.92	460	511.0	35.8	10.90	-141.98	-17.89	EXP	No	Yes
		Unit 3 PSD Baseline	ATLSUG3B	552.9	2945.2	71.8	21.9	6.0	1.83	480	522.0	57.4	17.50	-73.97	-9.32	EXP	No	Yes
		Unit 4 PSD Baseline	ATLSUG4B	552.9	2945.2	60.0	18.3	6.0	1.83	160	344.0	49.2	15.00	-73.41	-9.25	EXP	No	Yes
0850001	FPL - Martin																	
		Units 1&2	MART12	543.1	2992.9	499.0	152.1	26.2	7.99	338	443.2	69.0	21.03	1,808.00	227.81	NO	Yes	No
		Units 3&4	MART34	543.1	2992.9	213.0	64.9	20.0	6.10	280	410.9	62.0	18.90	242.40	30.54	CON	Yes	Yes
		Aux Boiler	MARTAUX	543.1	2992.9	60.0	18.3	3.6	1.10	504	535.4	50.0	15.24	0.10	0.01	CON	Yes	Yes
		Diesel Genarator	MARTGEN	543.1	2992.9	25.0	7.6	1.0	0.30	955	785.9	130.0	39.62	2.13	0.27	CON	Yes	Yes
		Unit 8 (EUs 11, 12, 17, 18)	MART8OIL	543.1	2992.9	120.0	36.6	19.0	5.79	296	420.0	73.5	22.40	148.00	18.65	CON	Yes	Yes
0990042	FPL - Riviera																	
		Units 3&4 at 2.5% S Fuel Oil	RIVU34	594.2	2960.6	298	90.8	16.0	4.88	263	401.5	62.0	18.90	652.00	82.15	CON	Yes	Yes
0710002	FPL - Fort Myers																	
		Unit 1 PSD Baseline	FMU1	422.1	2952.9	301.1	91.8	9.5	2.90	300	422.0	98.1	29.90	-169.05	-21.30	EXP	No	Yes
		Unit 2 PSD Baseline	FMU2	422.1	2952.9	397.5	121.2	18.1	5.52	275	408.0	63.0	19.20	-384.92	-48.50	EXP	No	Yes
		HRSGs 1-6	FMYHR1_6	422.1	2952.9	125.0	38.1	19.0	5.79	220	377.6	46.6	14.20	60.00	7.56	CON	Yes	Yes
		Combustion Turbines 1-12	FMYCT112	422.1	2952.9	32.0	9.8	11.4	3.47	975	797.0	189.4	57.73	622.20	78.40	CON	Yes	Yes
		CTs 3A-3B	FMYCT3	422.1	2952.9	80.0	24.4	20.5	6.25	1116	875.4	120.7	36.79	34.00	4.28	CON	Yes	Yes
0110036	FPL - Port Everglades	Units 1&2 at 2.5%S Fuel Oil	PTEVU12	587.4	2885.3	343	104.5	14.0	4.27	289	416.0	87.7	26.74	144.0	18.14	CON	Yes	Yes
		Units 3&4 at 2.5%S Fuel Oil	PTEVU34	587.4	2885.3	343	104.6	18.1	5.52	287	414.8	78.3	23.87	836.0	105.34	CON	Yes	Yes
		GT 1-12 (0.5%S Fuel Oil)	PTEVGTS	587.4	2885.3	44.0	13.4	15.6	4.75	860	733.2	93.3	28.45	60.65	7.64	CON	Yes	Yes

[a] Only Boilers 1 and 4 operate during the off-crop season. Represents worst-case emissions for May 1 through Sept. 30 off-crop season operation and October 1 through April 30 for on-crop season.

[b] Facilities or sources that operate only during the October 1 through April 30 crop season.

[c] Sugar mill sources that operate all year.

Note: EXP = PSD expanding source.
CON = PSD consuming source.
NO = Source does not affect PSD increment.
ND = No data available.

TABLE B-5
SUMMARY OF CO FACILITIES CONSIDERED FOR INCLUSION IN THE AAQS AIR MODEING ANALYSES

AIRS Number	Facility	County	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to Clewiston Mill [a] X (km)	Relative to Clewiston Mill [a] Y (km)	Relative to Clewiston Mill [a] Distance (km)	Relative to Clewiston Mill [a] Direction (deg)	Maximum CO Emissions (TPY)	Q, (TPY) Emission Threshold [b,c] (Dist - SID) x 20	Include in Modeling Analysis ?
Modeling Area [d]											
0510003	U.S. Sugar Clewiston	Hendry	506.1	2956.9	0.0	0.0	0.0	NA	64,644	SIA	YES
0990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	31.7	12.2	34.0	69	19,958	599.3	YES
Screening Area [d]											
0510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-18.5	0.7	18.5	272	4,406	290.3	YES
0990332	New Hope Power (Okeelanta)	Palm Beach	524.1	2940.0	18.0	-16.9	24.7	133	2,013	413.8	YES
0990005	Okeelanta Corp.	Palm Beach	525.0	2937.4	18.9	-19.5	27.2	136	141	463.1	NO
0990026	Sugar Cane Growers Coop.	Palm Beach	534.9	2953.3	28.8	-3.6	29.0	97	33,771	500.5	YES
0990019	Osceola Farms	Palm Beach	544.2	2968.0	38.1	11.1	39.7	74	6,843	713.7	YES
0990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	46.8	-11.7	48.2	104	25,065	884.8	YES
0850001	FPL - Martin	Martin	543.1	2992.9	37.0	36.0	51.6	46	2,285	952.5	YES
0850102	Indiantown Cogeneration L.P.	Martin	545.6	2990.7	39.5	33.8	52.0	49	1,651	959.7	YES
0990021	United Technologies Corp. (Pratt & Whitney Aircraft)	Palm Beach	562.0	2960.0	55.9	3.1	56.0	87	1,000 [c]	1,039.7	YES
0990349	SFWMD - Pump Stations G-310/S-6/G-335	Palm Beach	556.2	2927.8	50.1	-29.1	57.9	120	131	1,078.8	NO
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	44.8	61.2	75.8	36	170	1,436.9	NO
0990234	Palm Beach County Resource Recovery	Palm Beach	585.8	2960.2	79.7	3.3	79.8	88	1,733	1,515.4	YES
0360119	Lee County Resource Recovery	Lee	424.2	2945.7	-81.9	-11.2	82.7	262	108	1,573.2	NO
0710002	FPL - Fort Myers	Lee	422.1	2952.9	-84.0	-4.0	84.1	267	4,478	1,601.9	YES
0850021	Stuart Contracting	Martin	575.2	3006.8	69.1	49.9	85.2	54	ND	1,624.7	NO
0500045	Lake Worth Utilities	Palm Beach	592.8	2943.7	86.7	-13.2	87.7	99	204	1,674.0	NO
0990568	Lake Worth Generating	Palm Beach	592.8	2943.7	86.7	-13.2	87.7	99	177	1,674.0	NO
Beyond Screening Area out to 134 km [d]											
0990042	FPL - Riviera Beach	Palm Beach	594.2	2960.6	88.1	3.7	88.2	88	1,156	1,683.6	YES
0550018	TECO - Phillips Station	Highlands	464.3	3035.4	-41.8	78.5	88.9	332	868	1,698.7	NO
0990350	SFWMD - Pump Station S-9	Palm Beach	555.9	2882.2	49.8	-74.7	89.8	146	44	1,715.1	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	77.0	-49.0	91.3	122	171	1,745.4	NO
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	77.2	-48.9	91.4	122	420	1,747.7	NO
0112120	Wheelabrator North Broward, Inc.	Broward	583.6	2907.6	77.5	-49.3	91.9	122	358	1,757.0	NO
0112515	Enron/Pompano Energy Center	Broward	583.7	2905.4	77.6	-51.5	93.1	124	146	1,782.7	NO
0550004	TECO - Sebring/Dinner Lake	Highlands	456.8	3042.5	-49.3	85.6	98.8	330	28	1,895.6	NO
1110003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	60.7	79.4	99.9	37	156	1,918.9	NO
0112119	Wheelabrator South Broward, Inc.	Broward	579.6	2883.3	73.5	-73.6	104.0	135	383	2,000.3	NO
0110037	FPL - Ft. Lauderdale	Broward	580.1	2883.3	74.0	-73.6	104.4	135	1,489	2,007.4	YES
0110036	FPL - Port Everglades	Broward	587.4	2885.3	81.3	-71.6	108.3	131	7,941	2,086.7	YES
0250020	Tarmac - Pennsuco Cement Plant	Dade	562.9	2861.7	56.8	-95.2	110.9	149	1,367	2,137.1	YES
0250348	Miami-Dade County Resource Recovery	Miami-Dade	563.8	2857.6	57.7	-99.3	114.8	150	1,071	2,216.9	YES
0610029	City of Vero Beach Municipal Utilities	St. Lucie	567.1	3056.5	61.0	99.6	116.8	31	42	2,255.9	NO

ND = No data available.

[a] U.S. Sugar Clewiston Mill Coordinates: 506.1 2956.9

[b] The significant impact distance (SID) for the project is estimated to be 4 km.

[c] Based on the North Carolina Screening Threshold method, a background facility is included in the modeling analysis if the facility is beyond the modeling area and its emission rate is greater than the product of (Distance-SID) x 20.

[d] "Modeling Area" is the area in which the project is predicted to have a significant impact at each mill (assumed to be 4 km). EPA recommends that all sources within this area be modeled.
"Screening Area" is the distance between the U.S. Sugar Clewiston and Bryant Mills (34 km) plus the assumed significant distance of 4 km plus 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area.
"Beyond Screening Area out to 134 km" is the distance between the facilities and out to 100 km in which large sources are included in the modeling.

[e] Emissions only for the new rocket engine.

TABLE B-6
SUMMARY OF CO SOURCES INCLUDED IN THE AAQS AIR MODELING ANALYSES

AIRS Number	Facility	Units	ISCST3 ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack and Operating Parameters: Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	Emission Rate lb/hr	Emission Rate g/s
0510015	Southern Gardens Citrus	Peel Dryers 1-2	SGARDDRY	487.6	2957.6	125.0	38.10	5.7	1.73	109	316	24.4	7.44	1,463.0	184.34
		Boilers 1-4	SGARDBLR	487.6	2957.6	55.0	16.77	4.0	1.22	401	478	46.7	14.22	4.0	0.50
0990332	New Hope Power (Okeelanta)	Okeelanta Power Blrs 1,2,3 [c]	OKCOGENF	524.1	2940.0	199.0	60.66	10.0	3.05	352	451	63.6	19.39	1,140.0	143.64
0990026	Sugar Cane Growers Coop. [d]	**On-crop season**													
		Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.0	11.89	2,171.0	273.55
		Unit 2	SCRBLR2N	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.6	12.07	2,171.0	273.55
		Unit 3	SCRBLR3N	534.9	2953.3	180.0	54.88	5.3	1.63	156	342	40.3	12.30	1,489.0	187.61
		Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.88	8.9	2.72	162	345	48.0	14.63	3,712.0	467.71
		Unit 5	SCRBLR5N	534.9	2953.3	150.0	45.73	7.0	2.13	160	344	77.1	23.50	2,854.0	359.60
		Unit 8	SCRBLR8N	534.9	2953.3	155.0	47.26	9.5	2.90	154	341	37.6	11.47	3,024.0	381.02
		Off-crop season													
		Unit 1	SCRBLR1F	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.0	11.89	2,171.0	273.55
		Unit 4	SCRBLR4F	534.9	2953.3	180.0	54.88	8.9	2.72	162	345	48.0	14.63	3,712.0	467.71
0990019	Osceola Farms [a]	Unit 2a,b	OSBLR2AB	544.2	2968.0	90.0	27.43	5.0	1.52	148	338	36.5	11.13	1,820.0	229.32
		Unit 3	OSBLR3	544.2	2968.0	90.0	27.43	6.3	1.52	148	338	36.5	11.13	1,022.0	128.77
		Unit 4	OSBLR4	544.2	2968.0	90.0	27.43	6.0	1.83	154	341	54.2	16.52	1,900.8	239.50
		Unit 5a	OSBLR5A	544.2	2968.0	90.0	27.43	5.0	1.52	150	339	56.9	17.35	950.4	119.75
		Unit 5b	OSBLR5B	544.2	2968.0	90.0	27.43	5.0	1.52	150	339	46.7	14.24	950.4	119.75
		Unit 6	OSBLR6	544.2	2968.0	90.0	27.43	6.2	1.52	151	339	53.0	16.16	1,820.0	229.32
0990016	Atlantic Sugar Association [a]	Unit 1	ATLSUG1	552.9	2945.2	89.9	27.40	6.0	1.83	180	355	61.1	18.62	2,380.2	299.90
		Unit 2	ATLSUG2	552.9	2945.2	89.9	27.40	6.0	1.83	180	355	60.1	18.32	4,647.6	585.60
		Unit 3	ATLSUG3	552.9	2945.2	89.9	27.40	6.0	1.83	197	365	59.7	18.20	1,430.2	180.20
		Unit 4	ATLSUG4	552.9	2945.2	89.9	27.40	6.0	1.83	158	343	62.7	19.12	1,430.2	180.20
		Unit 5 PSD [c]	ATLSUG5	552.9	2945.2	89.9	27.40	5.5	1.68	150	339	53.3	16.25	1,659.5	209.10
0850001	FPL - Martin	Units 1&2	MART12	543.1	2992.9	499.0	152.10	26.2	7.99	338	443	69.0	21.03	308.9	38.92
		Units 3&4	MART34	543.1	2992.9	212.9	64.90	20.0	6.10	280	411	62.0	18.90	211.6	26.66
		Aux Boiler	MARTAUX	543.1	2992.9	60.0	18.30	3.6	1.10	504	535	50.0	15.24	3.6	0.45
		Diesel Generator	MARTGEN	543.1	2992.9	24.9	7.60	1.0	0.30	955	786	130.0	39.62	6.7	0.85
		Unit 8 (Eus 11, 12, 17, 18)	MART8OIL	543.1	2992.9	120.0	36.58	19.0	5.79	296	420	73.5	22.40	272.4	34.32
0850102	Indiantown Cogeneration L.P.	Pulverized Coal Main Boiler	INDTWN1	545.6	2990.7	495.1	150.90	16.0	4.88	140	333	93.2	28.41	376.0	47.38
		Auxiliary and Temporary Boilers	INDTWN3	545.6	2990.7	210.0	64.02	5.0	1.52	350	450	87.6	26.71	60.2	7.59
0990021	United Technologies Corp. (Pratt & Whitney Aircraft)														
		Jet Engine	PRATJE	562.0	2960.0	69.9	21.30	60.0	18.30	230	383	40.0	12.20	166,666.7	21,000.00
		Air Compressor/Heater (ACHR-2-B2)	PRATACHR	562.0	2960.0	50.0	15.24	3.0	0.91	1000	811	471.5	143.70	12.9	1.63
		Boilers (BO-12, -1, -2, -14)	PRATBO12	562.0	2960.0	15.0	4.57	2.5	0.76	500	533	22.6	6.90	12.2	1.54
		Two furnaces (FU-3-MHT, FU-4-MHT)	PRATFU34	562.0	2960.0	49.0	14.94	3.9	1.19	77	298	0.1	0.04	1.0	0.12
		Water Evaporator (EV-1-MW)	PRATWE1	562.0	2960.0	12.0	3.66	0.7	0.21	77	298	8.5	2.60	16.0	2.01
		Miscellaneous Air and Fuel Heaters	PRATMISC	562.0	2960.0	20.0	6.10	1.6	0.49	500	533	16.1	4.90	5.1	0.64
		Emergency Electrical Generating Facility	PRATEEGF	562.0	2960.0	12.0	3.66	0.7	0.21	1200	922	496.7	151.40	1.8	0.23
		Ten Jet Engine Test Stands	PRATJE10	562.0	2960.0	18.0	5.49	12.0	3.66	300	422	0.3	0.08	47.5	5.98
		A-10 Test Stand	PRATA10	562.0	2960.0	19.0	5.79	13.7	4.17	280	411	350.0	106.68	109.4	13.78
0990234	Palm Beach County Resource Recovery														
		Units 1 and 2	PBCRRF	585.8	2960.2	250.0	76.20	6.7	2.04	450	505	81.7	24.91	275.6	34.72
		Landfill Gas Collection System Class I	PBRRLG1	585.8	2960.2	23.0	7.01	0.7	0.21	1400	1033	80.2	24.44	19.6	2.47
		Landfill Gas Collection System Class III	PBRRLG3	585.8	2960.2	23.0	7.01	0.5	0.15	1400	1033	152.8	46.57	19.6	2.47

TABLE B-6
SUMMARY OF CO SOURCES INCLUDED IN THE AAQS AIR MODELING ANALYSES

AIRS Number	Facility	Units	ISCST3 ID Name	UTM Coordinates East (km)	UTM Coordinates North (km)	Stack and Operating Parameters: Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	Emission Rate lb/hr	Emission Rate g/s
0710002	FPL - Fort Myers	Combustion Turbines 1 - 12	FMYCT112	422.1	2952.9	32.0	9.75	11.4	3.48	975	797	189.4	57.74	489.6	61.69
		HRSGs 1-6	FMYHR1_6	422.1	2952.9	125.0	38.10	19.0	5.79	220	378	46.6	14.21	269.4	33.94
		CTs 3A-3B	FMYCT3	422.1	2952.9	80.1	24.40	20.5	6.25	1116	875	120.7	36.80	272.4	34.32
0990042	FPL - Riveria Beach														
		Units 3&4 at 2.5% S Fuel Oil	RIVU34	594.2	2960.6	298.0	90.83	16.0	4.88	263	401	62.0	18.90	264.0	33.26
0110037	FPL - Ft. Lauderdale														
		GT 1-12 (0.5%S Fuel Oil)	LDGT1_12	580.1	2883.3	45.0	13.72	7.8	2.37	860	733	375.0	114.30	966.0	121.72
		GT 13-24 (0.5%S Fuel Oil)	LDGT1324	580.1	2883.3	44.0	13.41	15.6	4.75	860	733	93.3	28.44	966.0	121.72
		CTs 1-4 PSD	LAUDU45	580.1	2883.3	150.0	45.72	18.0	5.49	330	439	47.9	14.60	356.0	44.86
0110036	FPL - Port Everglades														
		Units 1&2 at 2.5% S Fuel Oil	PTEVU12	587.4	2885.3	342.8	104.51	14.0	4.27	289	416	87.7	26.74	403.2	50.80
		Units 3&4 at 2.5% S Fuel Oil	PTEVU34	587.4	2885.3	342.8	104.85	18.1	5.52	287	415	78.3	23.87	702.2	88.48
		GT 1-12 (0.5%S Fuel Oil)	PTEVGTS	587.4	2885.3	44.0	13.41	15.6	4.75	860	733	93.3	28.45	707.6	89.16
0250020	Tarmac - Pennsuco Cement Plant														
		Raw Mill and Pyroprocessing	TARMRMP	562.9	2861.7	420.0	128.05	14.0	4.27	294	419	55.8	17.00	575.0	72.45
0250348	Dade Co. Resource Recovery														
		Units 1, 2, 3, 4	MDCRRF	563.8	2857.6	250.0	76.20	8.5	2.59	300	422	66.7	20.34	307.8	38.78

[a] Facilities or sources that operate only during the October 1 through April 30 crop season.

[b] Sugar mill sources that operate only during the May 1 through September 30 off-crop season (assumes 150 days).

[c] Sugar mill sources that operate all year.

[d] Represents worst case emissions for May 1-September 30 off-crop season operation, and October 1-April 30 for on-crop season.

Note: EXP = PSD expanding source.
CON = PSD consuming source.
NO = Source does not affect PSD increment.
ND = No data available.

TABLE B-7

SUMMARY OF NOx FACILITIES CONSIDERED FOR INCLUSION IN THE AAQS AND PSD CLASS II AIR MODELING ANALYSES

APIS Number	Facility	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to U.S. Sugar Clewiston [a] X (km)	Y (km)	Distance (km)	Direction (deg)	Maximum NO_x Emissions (TPY)	Q, Emission Threshold (Dist -4) x 20	Include in Modeling Analysis[b] ?
Modeling Area [c]										
0510003	U.S. Sugar Corp. - Clewiston	506.1	2956.9	0.0	0.00	0.0	NA	2,478	SIA	YES
0990061	U.S. Sugar Corp. - Bryant	537.8	2969.1	31.7	12.2	34.0	69	2,012	600.0	YES
Screening Area [c]										
0510015	Southern Gardens Citrus	487.6	2957.6	-18.5	0.7	18.5	272	199	290.3	YES
0430008	Atlas-Transoil Inc.	489.2	2966.6	-16.9	9.7	19.5	300	35	309.7	NO
0990005	Okeelanta Corp.	525.0	2937.4	18.9	-19.5	27.2	136	185	463.1	NO
0990332	New Hope Power Partnership	524.1	2940.0	18.0	-16.9	24.7	133	863	413.8	YES
0990026	Sugar Cane Growers Coop.	534.9	2953.3	28.8	-3.6	29.0	97	4,106	500.5	YES
0990615	SFWMD Pump Station G-372	519.1	2923.7	13.0	-33.3	35.7	159	248	634.3	NO
0990019	Osceola Farms	544.2	2968.0	38.1	11.1	39.7	74	961	713.7	YES
0110351	SFWMD Pump Station S-8 & G-404	522.3	2912.3	16.2	-44.6	47.5	160	771	869.3	YES
0990016	Atlantic Sugar Association	552.9	2945.2	46.8	-11.7	48.2	104	1,127	884.8	YES
0510004	A. Duda & Sons, Inc. / Citrus Belle	456.4	2950.3	-49.7	-6.6	50.1	262	75	922.7	NO
0990614	SFWMD Pump Station G-370	540.4	2919.5	34.3	-37.5	50.8	137	249	936.1	NO
0990549	SFWMD Pump Station G-310	554.2	2940.5	48.1	-16.5	50.8	109	249	936.7	NO
0850001	FPL - Martin	543.1	2992.9	37.0	36.0	51.6	46	38,286	952.5	YES
0850102	Indiantown Cogeneration L.P.	545.6	2991.5	39.5	34.6	52.5	49	2,583	970.2	YES
0990021	United Technologies Corp. (Pratt & Whitney Aircr	562.0	2960.0	55.9	3.1	56.0	87	1,791	1,039.7	YES
0990530	Hubbard Construction Company	562.1	2955.6	56.0	-1.3	56.1	91	30	1,041.1	NO
0990349	SFWMD Pump Station S-5A	562.6	2951.3	56.4	-5.6	56.7	96	1,106	1,054.5	YES
0990350	SFWMD Pump Station S-6	556.2	2927.8	50.1	-29.1	57.9	120	247	1,078.0	NO
0990566	Indian Trail Improvement District	564.7	2956.2	58.6	-0.7	58.6	91	22	1,091.9	NO
7770073	Apac-Southeast, Inc. - Portland Asphalt Plant #450	514.5	3014.9	8.4	58.0	58.6	8	26	1,092.6	NO
0990620	SFWMD Pump Station S-319	565.7	2951.4	59.6	-5.5	59.8	95	241	1,116.5	NO
0990621	SFWMD Pump Station S-362	565.3	2946.1	59.2	-10.8	60.2	100	249	1,123.2	NO
0930109	BP Technology Inc.	525.2	3017.4	19.1	60.5	63.4	18	48	1,188.7	NO
0210018	Florida Rock Industries	467.8	2905.8	-38.3	-51.1	63.9	217	47	1,197.2	NO
7775215	Daniel P. Mays	445.8	2934.5	-60.3	-22.4	64.3	250	88	1,206.0	NO
0550014	Better Roads, Inc. - Lake Placid Asphalt Plant	465.6	3008.7	-40.5	51.8	65.8	322	60	1,235.1	NO
0930104	Okeechobee Landfill, Inc.	530.3	3024.0	24.2	67.1	71.3	20	118	1,345.7	NO
0990087	Ranger Construction Industries, Inc.	579.9	2951.7	73.8	-5.2	74.0	94	24	1,399.7	NO
0710169	Harper Bros., Inc. - Florida Rock Ind.	432.3	2931.4	-73.8	-25.5	78.1	251	78	1,481.4	NO
0150079	Earthsource, Inc.	426.6	2963.5	-79.5	6.6	79.8	275	94	1,515.5	NO
0710133	Waste Management, Inc. of Florida	425.0	2942.8	-81.1	-14.1	82.3	260	52	1,566.8	NO
0710187	Apac-Southeast, Inc. - Ft. Myers Astec Turbo Plant	428.0	2930.4	-78.1	-26.5	82.5	251	20	1,569.2	NO
0710119	Lee County Resource Recovery	424.2	2945.7	-81.9	-11.2	82.7	262	640	1,573.0	NO
0710002	FPL - Fort Myers	422.1	2952.9	-84.0	-4.0	84.1	267	31,284	1,601.9	YES
0710065	Apac-Spoutheast, Inc. - Fort Myers Plant 1	424.3	2930.2	-81.8	-26.7	86.0	252	34	1,640.9	NO
Bevond Screening Area out to 134 km [d]										
0550018	TECO - Phillips Station	464.3	3035.4	-41.8	78.5	88.9	332	5,016	1,698.7	YES
0112410	SFWMD Pump Station S-9/S-9A	555.9	2882.2	49.8	-74.7	89.8	146	404	1,715.6	NO
1110004	Tropicana Products, Inc.	559.6	3028.3	53.5	71.4	89.2	37	84	1,704.8	NO
0550032	Turf Care Supply Corp. - Erieview Twr.	469.5	3038.4	-36.6	81.5	89.3	336	57	1,706.8	NO
1110060	Florida Gas Transmission Company	557.2	3035.8	51.1	78.9	94.0	33	664	1,800.1	NO
0210051	Waste Management Inc. of Florida	434.6	2893.2	-71.5	-63.7	95.8	228	59	1,835.2	NO
0210023	Apac-Southeast, Inc. - Naples Asphalt Plant	429.2	2898.8	-76.9	-58.1	96.4	233	48	1,847.6	NO
1110003	Fort Pierce Utilities	566.8	3036.3	60.7	79.4	99.9	37	2,083	1,918.9	YES
7774818	Better Roads, Inc. - Naples Asphalt Plant	432.5	2889.7	-73.6	-67.2	99.7	228	61	1,913.3	NO
0112119	Wheelabrator South Broward, Inc.	578.9	2883.4	73.5	-73.6	104.0	135	1,497	2,000.3	YES
0112095	Weekley Asphalt Paving, Inc.	567.8	2872.9	61.7	-84.0	104.2	144	89	2,004.5	NO
0110037	FPL - Ft. Lauderdale	580.1	2883.3	74.0	-73.6	104.4	135	14,025	2,007.4	YES
7770250	Rinker Materials Corporation	562.8	2866.0	56.7	-90.9	107.1	148	33	2,062.7	NO
0110036	FPL - Port Everglades	587.4	2885.3	81.3	-71.6	108.3	131	25,217	2,086.7	YES
0250624	General Asphalt Co., Inc.	569.7	2868.3	63.6	-88.6	109.0	144	81	2,100.7	NO
0270003	Peace River Citrus Products	409.8	3010.1	-96.3	53.2	110.0	299	27	2,120.4	NO
0250020	Tarmac - Pennsuco Cement Plant	562.9	2861.7	56.8	-95.2	110.9	149	3,473	2,137.1	YES
0610029	City of Vero Beach Municipal Utilities	561.4	3056.5	55.3	99.6	113.9	29	4,315	2,198.4	YES
0250348	Miami Dade Resource Recovery	564.3	2857.4	57.7	-99.3	114.8	150	2,644	2,216.9	YES
0250600	Miami Dade Water and Sewer Dept.	584.5	2867.0	78.4	-89.9	119.3	139	230	2,305.5	NO
0490043	Vandolah Power Company, LLC	408.8	3044.5	-97.4	87.6	131.0	312	1,008	2,539.2	NO

[a] U.S. Sugar Clewiston Coordinates 506.1 2956.9

[b] The significant impact distance for the project is estimated to be: 4.0 Kilometers

[c] "Modeling Area" is the area in which the project is predicted to have a significant impact at each mill (assumed to be 4 km). EPA recommends that all sources within this area be model
"Screening Area" is the distance between the U.S. Sugar Clewiston and Bryant Mills (34 km) plus the assumed significant distance of 4 km plus 50 km beyond the modeling area.
EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area.

"Beyond Screening Area out to 134 km" is the distance between the facilities and out to 100 km in which large sources are included in the modeling.

TABLE B-8
SUMMARY OF STACK, OPERATING, AND EMISSIONS DATA OF FACILITIES WITH NOx EMISSIONS INCLUDED IN THE AAQS AND PSD CLASS II MODELING ANALYSIS

AIRS			Modeling	UTM Coordinates		Stack Parameters								Emission Rate		PSD Source?	Modeled in	
				East	North	Height		Diameter		Temperature		Velocity						
Number	Facility	Units	ID Name	(km)	(km)	ft	m	ft	m	°F	K	ft/s	m/s	TPY	g/s	(EXP/CON)	AAQS	Class II
0510003	U.S. Sugar - Clewiston [b]	PSD Baseline (On-crop season only)																
		Unit 1 PSD Baseline	USSBRL1B	506.1	2956.9	75.8	23.10	6.1	1.86	160	344	99.1	30.20	-93.7	-6.27	EXP	Yes	Yes
		Unit 2 PSD Baseline	USSBLR2B	506.1	2956.9	75.8	23.10	6.1	1.86	158	343	117.1	35.70	-94.0	-6.29	EXP	Yes	Yes
		Unit 3 PSD Baseline	USSBLR3B	506.1	2956.9	89.9	27.40	7.5	2.29	156	342	48.2	14.70	-45.1	-3.03	EXP	Yes	Yes
		Unit 4 PSD Baseline	USSBLR4B	506.1	2956.9	149.9	45.70	8.2	2.51	160	344	83.3	25.40	-127.9	-8.76	EXP	Yes	Yes
		Unit 5 PSD Baseline	USSBLR5B	506.1	2956.9	75.8	23.10	6.1	1.86	430	494	145.3	44.30	-20.9	-1.54	EXP	Yes	Yes
		Unit 6 PSD Baseline	USBLR56B	506.1	2956.9	75.8	23.10	6.1	1.86	430	494	145.3	44.30	-18.0	-1.34	EXP	Yes	Yes
0510015	Southern Gardens Citrus	Peel Dryers 1-2	SGARDDRY	487.6	2957.6	125.0	38.10	5.7	1.74	109	316	24.4	7.45	130.1	3.75	CON	Yes	Yes
		Boilers 1-4	SGARDBLR	487.6	2957.6	55.0	16.76	4.0	1.22	400	478	46.7	14.22	69.3	2.00	CON	Yes	Yes
0990332	New Hope Power (Okeelanta)	Okeelanta Power Blrs 1,2,3 [b]	OKCOGENF	524.1	2940.0	199.0	60.66	10.0	3.05	352	451	63.6	19.39	862.5	24.84	CON	Yes	Yes
0990005	Okeelanta Corp. [a]	Boiler No. 4 PSD Baseline	OKBLR4B	525.0	2937.4	75.1	22.90	7.5	2.29	140	333	24.1	7.36	-27.3	-1.36	EXP	No	Yes
		Boiler No. 5 PSD Baseline	OKBLR5B	525.0	2937.4	75.1	22.90	7.5	2.29	140	333	39.6	12.07	-37.8	-1.89	EXP	No	Yes
		Boiler No. 6 PSD Baseline	OKBLR6B	525.0	2937.4	75.1	22.90	7.5	2.29	142	334	28.7	8.74	-31.9	-1.59	EXP	No	Yes
		Boiler No. 10 PSD Baseline	OKBLR10B	525.0	2937.4	75.1	22.90	7.5	2.29	142	334	33.9	10.35	-36.0	-1.80	EXP	No	Yes
		Boiler No. 11 PSD Baseline	OKBLR11B	525.0	2937.4	75.1	22.90	7.5	2.29	156	342	32.4	9.89	-46.0	-2.30	EXP	No	Yes
		Boiler No. 12 PSD Baseline	OKBLR12B	525.0	2937.4	75.1	22.90	7.5	2.29	134	330	26.9	8.20	-57.7	-2.88	EXP	No	Yes
		Boiler No. 14 PSD Baseline	OKBLR14B	525.0	2937.4	75.1	22.90	7.5	2.29	140	333	27.2	8.30	-63.6	-3.18	EXP	No	Yes
		Boiler No. 15 PSD Baseline	OKBLR15B	525.0	2937.4	75.1	22.90	7.5	2.29	138	332	33.5	10.20	-50.5	-2.52	EXP	No	Yes
		Boiler No. 16 [b]	OKBLR16	525.0	2937.4	75.0	22.86	5.0	1.52	410	483	75.0	22.86	184.8	5.32	CON	Yes	Yes
0990026	Sugar Cane Growers Coop. [c]	On-crop season																
		Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.0	11.89	556.5	16.03	CON	Yes	Yes
		Unit 2	SCRBLR2N	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.6	12.07	550.6	15.86	CON	Yes	Yes
		Unit 3	SCRBLR3N	534.9	2953.3	180.0	54.88	5.3	1.62	156	342	40.3	12.30	438.2	12.62	CON	Yes	Yes
		Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.88	8.9	2.72	162	345	48.0	14.63	1,195.1	34.42	CON	Yes	Yes
		Unit 5	SCRBLR5N	534.9	2953.3	150.0	45.73	7.0	2.13	160	344	77.1	23.50	916.2	26.39	CON	Yes	Yes
		Unit 8	SCRBLR8N	534.9	2953.3	155.0	47.26	9.5	2.90	154	341	37.6	11.47	449.0	12.93	CON	Yes	Yes
		Off-crop season																
		Unit 1	SCRBLR1F	534.9	2953.3	150.0	45.73	7.0	2.13	156	342	39.0	11.89	556.5	16.03	CON	Yes	Yes
		Unit 4	SCRBLR4F	534.9	2953.3	180.0	54.86	8.9	2.72	162	345	48.0	14.63	1,195.1	34.42	CON	Yes	Yes
		Baseline																
		Boiler No. 1 PSD Baseline Off-crop season	SCRBLR1BF	534.9	2953.3	79.1	24.12	5.5	1.68	395	475	52.3	15.95	-68.0	-3.40	EXP	Yes	Yes
		Boiler No. 2 PSD Baseline Off-crop season	SCRBLR2BF	534.9	2953.3	79.1	24.12	5.5	1.68	405	480	58.7	17.90	-68.0	-3.40	EXP	Yes	Yes
		Boiler No. 3 PSD Baseline Off-crop season	SCRBLR3BF	534.9	2953.3	79.1	24.12	5.5	1.68	470	516	54.1	16.49	-41.6	-2.08	EXP	Yes	Yes
		Boiler No. 4 PSD Baseline Off-crop season	SCRBLR4BF	534.9	2953.3	86.0	26.22	5.3	1.62	149	338	32.4	9.88	-77.7	-3.88	EXP	Yes	Yes
		Boiler No. 5 PSD Baseline Off-crop season	SCRBLR5BF	534.9	2953.3	79.1	24.12	6.7	2.04	490	528	93.2	28.41	-51.8	-2.59	EXP	Yes	Yes
		Boiler No. 8 PSD Baseline Off-crop season	SCRBLR8BF	534.9	2953.3	154.9	47.24	9.5	2.90	151	339	44.7	13.62	-78.5	-2.26	EXP	Yes	Yes
		Boiler No. 1 PSD Baseline On-crop season	SCRBLR1BN	534.9	2953.3	79.1	24.12	5.5	1.68	395	475	52.3	15.95	-68.0	-3.40	EXP	Yes	Yes
		Boiler No. 2 PSD Baseline On-crop season	SCRBLR2BN	534.9	2953.3	79.1	24.12	5.5	1.68	405	480	58.7	17.90	-68.0	-3.40	EXP	Yes	Yes
		Boiler No. 3 PSD Baseline On-crop season	SCRBLR3BN	534.9	2953.3	79.1	24.12	5.5	1.68	470	516	54.1	16.49	-41.6	-2.08	EXP	Yes	Yes
		Boiler No. 4 PSD Baseline On-crop season	SCRBLR4BN	534.9	2953.3	86.0	26.22	5.3	1.62	149	338	32.4	9.88	-77.7	-3.88	EXP	Yes	Yes
		Boiler No. 5 PSD Baseline On-crop season	SCRBLR5BN	534.9	2953.3	79.1	24.12	6.7	2.04	490	528	93.2	28.41	-51.8	-2.59	EXP	Yes	Yes
		Boiler No. 8 PSD Baseline Off-crop season	SCRBLR8BN	534.9	2953.3	154.9	47.24	9.5	2.90	151	339	44.7	13.62	-78.5	-2.26	EXP	Yes	Yes
0990019	Osceola Farms [a]	Unit 2a,b		544.2	2968.0	90.0	27.44	5.0	1.52	148	338	36.5	11.13	242.0	6.97	CON	Yes	Yes
		Unit 3	OSBLR3	544.2	2968.0	90.0	27.44	6.3	1.91	148	338	36.5	11.13	96.0	2.76	CON	Yes	Yes
		Unit 4	OSBLR4	544.2	2968.0	90.0	27.44	6.0	1.83	154	341	54.2	16.52	241.9	6.97	CON	Yes	Yes
		Unit 5a	OSBLR5A	544.2	2968.0	90.0	27.44	5.0	1.52	150	339	56.9	17.35	142.6	4.11	CON	Yes	Yes
		Unit 5b	OSBLR5B	544.2	2968.0	90.0	27.44	5.0	1.52	150	339	46.7	14.24	142.6	4.11	CON	Yes	Yes
		Unit 6	OSBLR6	544.2	2968.0	90.0	27.44	6.2	1.88	151	339	53.0	16.16	96.0	2.76	CON	Yes	Yes
		Unit 2 PSD Baseline	OSBLR2B	544.2	2968.0	72.2	22.00	5.0	1.52	154	341	59.4	18.11	-37.6	-1.88	EXP	No	Yes
		Unit 3 PSD Baseline	OSBLR3B	544.2	2968.0	72.2	22.00	6.3	1.93	154	341	47.6	14.51	-16.9	-0.84	EXP	No	Yes
		Unit 4 PSD Baseline	OSBLR4B	544.2	2968.0	72.2	22.00	6.0	1.83	154	341	61.7	18.81	-30.4	-1.52	EXP	No	Yes
		Unit 5 PSD Baseline	OSBLR5B	544.2	2968.0	72.2	22.00	5.0	1.52	156	342	39.4	12.02	-38.3	-1.10	EXP	No	Yes
		Unit 6 PSD Baseline	OSBLR6B	544.2	2968.0	90.0	27.43	6.3	1.93	155	341	56.0	17.07	-39.9	-2.00	EXP	No	Yes
0110351	SFWMD Pump Stations S-8 & G-404	Five diesel engines	SFWMDS8	522.3	2912.3	12.0	3.66	2.0	0.61	660	622	31.6	9.63	771.2	23.19	CON	Yes	Yes

TABLE B-8
SUMMARY OF STACK, OPERATING, AND EMISSIONS DATA OF FACILITIES WITH NOx EMISSIONS INCLUDED IN THE AAQS AND PSD CLASS II MODELING ANALYSIS

				UTM Coordinates		Stack Parameters												
						Height		Diameter		Temperature		Velocity		Emission Rate		PSD Source?	Modeled in	
AIRS Number	Facility	Units	Modeling ID Name	East (km)	North (km)	ft	m	ft	m	°F	K	ft/s	m/s	TPY	g/s	(EXP/CON)	AAQS	Class II
0990016	Atlantic Sugar Association [a]	Unit 1	ATLSUG1	552.9	2945.2	90.0	27.44	6.0	1.83	180	355	61.1	18.62	275.2	7.93	NO	Yes	No
		Unit 2	ATLSUG2	552.9	2945.2	90.0	27.44	6.0	1.83	180	355	60.1	18.33	275.2	7.93	NO	Yes	No
		Unit 3	ATLSUG3	552.9	2945.2	90.0	27.44	6.0	1.82	197	365	59.7	18.21	255.5	7.36	NO	Yes	No
		Unit 4	ATLSUG4	552.9	2945.2	90.0	27.44	6.0	1.82	158	343	62.7	19.12	249.6	7.19	NO	Yes	No
		Unit 5 PSD [b]	ATLSUG5	552.9	2945.2	90.0	27.44	5.5	1.68	150	339	53.3	16.25	71.7	2.06	CON	Yes	Yes
		Unit 5 PSD Baseline	ATLSUG5B	552.9	2945.2	89.9	27.40	5.5	1.68	151	339	51.5	15.70	-14.8	-0.74	EXP	No	Yes
0850001	FPL - Martin	Units 1 & 2	MART12	543.1	2992.9	498.9	152.10	26.2	7.99	338	443	69.0	21.03	22,732.0	654.68	NO	Yes	No
		Units 3 & 4	MART34	543.1	2992.9	212.9	64.92	20.0	6.10	280	411	62.0	18.90	12,432.0	89.21	CON	Yes	Yes
		Unit 8 (Eus 11, 12, 17, 18)	MART8OIL	543.1	2992.9	120.0	36.60	19.0	5.79	296	420	73.5	22.40	2,796.2	160.90	CON	Yes	Yes
0850102	Indiantown Cogeneration L.P.	Pulverized Coal Main Boiler	INDTWN1	545.6	2991.5	494.9	150.88	16.0	4.88	140	333	93.2	28.41	2,549.0	73.33	CON	Yes	Yes
		Auxiliary and Temporary Boilers	INDTWN3	545.6	2991.5	209.9	64.01	5.0	1.52	350	450	87.6	26.70	40.4	12.32	CON	Yes	Yes
0990349	SFWMD Pump Station S-5A	Six 1600 hp Diesel Engines	SFWMD5A	562.6	2951.3	16.0	4.88	3.3	0.99	775	686	17.4	5.30	1,106.3	31.86	CON	Yes	Yes
0990021	United Technologies Corp. (Pratt & Whitney Aircraft)																	
		Air Compressor/Heater (ACHR-2-B2)	PRATACHR	562.0	2960.0	50.0	15.24	3.0	0.91	1000	811	471.6	143.78	572.3	16.48	CON	Yes	Yes
		Boilers (BO-12, -1, -2, -14)	PRATBOI2	562.0	2960.0	15.0	4.57	2.5	0.76	500	533	22.7	6.92	26.3	0.76	NO	Yes	No
		Two furnaces (FU-3-MHT, FU-4-MHT)	PRATFU34	562.0	2960.0	48.9	14.90	3.9	1.20	77	298	0.1	0.04	5.1	0.15	CON	Yes	Yes
		Water Evaporator (EV-1-MW)	PRATWE1	562.0	2960.0	12.1	3.70	0.7	0.20	77	298	8.5	2.60	0.1	0.00	CON	Yes	Yes
		Miscellaneous Air and Fuel Heaters	PRATMISC	562.0	2960.0	20.0	6.10	1.6	0.50	500	533	16.1	4.90	31.8	0.91	CON	Yes	Yes
		Emergency Electrical Generating Facility	PRATEEGF	562.0	2960.0	12.1	3.70	0.7	0.20	1200	922	496.6	151.40	233.5	6.72	NO	Yes	No
		Ten Jet Engine Test Stands	PRATJE10	562.0	2960.0	18.0	5.50	12.1	3.70	300	422	0.3	0.08	813.6	23.43	NO	Yes	No
		A-10 Test Stand	PRATA10	562.0	2960.0	19.0	5.79	13.7	4.17	280	411	349.9	106.68	39.0	1.12	NO	Yes	No
0710002	FPL - Fort Myers	Combustion Turbines 1 - 12	FMYCT112	422.1	2952.9	32.0	9.75	11.4	3.48	975	797	189.4	57.73	27,857.0	802.28	NO	Yes	No
		HRSGs 1 - 6	FMYHR1_6	422.1	2952.9	125.0	38.10	19.0	5.79	220	378	46.6	14.20	2,680.6	77.20	CON	Yes	Yes
		CTs 3A-3B	FMYCT3	422.1	2952.9	80.0	24.40	20.5	6.25	1116	875	128.2	39.08	746.4	21.50	CON	Yes	Yes
		Unit 1 PSD Baseline	FMU1B	422.1	2952.9	301.2	91.83	9.5	2.90	300	422	98.1	29.90	-910.0	-26.21	EXP	No	Yes
		Unit 2 PSD Baseline	FMU2B	422.1	2952.9	397.6	121.22	18.1	5.52	275	408	63.0	19.20	-4,140.0	-119.23	EXP	No	Yes
0550018	TECO - Phillips Station	Diesel Generating Unit 1	TECOPH1	464.3	3035.4	150.0	45.72	6.0	1.83	335	441	79.0	24.08	2,504.5	72.13	NO	Yes	No
		Diesel Generating Unit 2	TECOPH2	464.3	3035.4	150.0	45.72	6.0	1.83	350	450	79.0	24.08	2,504.5	72.13	NO	Yes	No
1110003	Fort Pierce Utilities	West Diesel #1	FPUD1	566.8	3036.3	23.0	7.01	3.0	0.91	950	783	39.0	11.89	392.4	11.30	NO	Yes	No
		East Diesel #2	FPUD2	566.8	3036.3	23.0	7.01	3.0	0.91	950	783	39.0	11.89	392.4	11.30	NO	Yes	No
		CCGT Unit # 9	FPUCCGT9	566.8	3036.3	68.0	20.73	11.2	3.41	426	492	59.8	18.23	592.7	17.07	CON	Yes	Yes
		Boiler Unit #6	FPUB6	566.8	3036.3	148.0	45.11	5.0	1.52	325	436	36.0	10.97	5.7	0.16	NO	Yes	No
		Boiler Unit #7 (Phase II Acid Rain Unit)	FPUB7	566.8	3036.3	147.0	44.81	7.1	2.16	308	426	61.1	18.62	457.1	13.16	NO	Yes	No
		Boiler Unit #8 (Phase II Acid Rain Unit)	FPUB8	566.8	3036.3	150.0	45.72	8.0	2.44	334	441	83.6	25.48	159.2	4.58	NO	Yes	No
		General Purpose Internal Combustion Engines	FPUICE	566.8	3036.3	150.0	45.72	8.0	2.44	334	441	83.6	25.48	83.6	2.41	NO	Yes	No
0112119	Wheelabrator South Broward, Inc.	MSW Combustor & Auxiliary Burners - Units 1,2,3	SBCRRF	578.9	2883.4	195.0	59.44	13.0	3.96	226	381	59.1	18.01	2,381.1	68.58	CON	Yes	Yes
0110037	FPL - Ft. Lauderdale	GT 1-12 (0.5%S Fuel Oil)	LDGT1_12	580.1	2883.3	45.0	13.72	7.8	2.37	860	733	374.9	114.30	5,161.4	148.65	NO	Yes	No
		GT 13-24 (0.5%S Fuel Oil)	LDGT1324	580.1	2883.3	44.0	13.41	15.6	4.75	860	733	93.3	28.44	5,161.4	148.65	NO	Yes	No
		CTs 1-4 PSD	LAUDU45	580.1	2883.3	150.0	45.72	18.0	5.49	330	439	47.9	14.60	10,834.0	312.01	CON	Yes	Yes
0110036	FPL - Port Everglades	Units 1&2 at 2.5%S Fuel Oil	PTEVU12	587.4	2885.3	342.8	104.50	14.0	4.27	289	416	87.6	26.70	11,458.0	330.00	NO	Yes	No
		Units 3&4 at 2.5%S Fuel Oil	PTEVU34	587.4	2885.3	342.8	104.50	18.1	5.52	287	415	78.4	23.90	33,218.0	956.68	NO	Yes	No
		GT 1-12 (0.5%S Fuel Oil)	PTEVGTS	587.4	2885.3	44.0	13.41	15.6	4.75	860	733	93.3	28.45	6,633.0	191.03	NO	Yes	No
0250020	Tarmac - Pennsuco Cement Plant	Kiln #3 PSD Baseline	TARMK3B	562.9	2861.7	199.9	60.96	15.0	4.57	390	472	35.4	10.79	-2,112.3	-60.83	EXP	No	Yes
		New Dry Process Kiln	TARMK4B	562.9	2861.7	410.0	125.00	14.0	4.27	199	366	55.8	17.00	2,300.0	66.20	CON	Yes	Yes
0610029	City of Vero Beach Municipal Utilities	Steam Generator Unit No.1	VERO1	561.4	3056.5	199.9	60.96	3.5	1.07	327	437	106.3	32.42	472.0	13.59	NO	Yes	No
		Steam Generator Unit No.2	VERO2	561.4	3056.5	199.9	60.96	3.5	1.07	322	434	123.2	37.57	580.0	16.70	NO	Yes	No
		Steam Generator Unit 3 (Phase II Acid Rain Unit)	VERO3	561.4	3056.5	199.9	60.96	6.0	1.83	333	440	68.6	20.91	975.3	28.09	NO	Yes	No
		Steam Generator Unit 4 (Phase II Acid Rain Unit)	VERO4	561.4	3056.5	199.9	60.96	7.0	2.13	306	425	77.7	23.68	1,800.2	51.85	NO	Yes	No
		CCGT Unit 5 (Phase II Acid Rain Unit)	VERO5	561.4	3056.5	63.6	19.39	123.3	37.58	290	416	63.6	19.39	487.4	14.04	CON	Yes	Yes
0250348	Miami-Dade Resource Recovery	Units 1,2,3,4	MDCRRF	564.3	2857.4	249.9	76.20	8.5	2.59	300	422	66.7	20.34	2,459.6	70.84	CON	Yes	Yes
		Units 1,2,3,4 Baseline	MDCRRFB	564.3	2857.4	149.9	45.70	9.0	2.74	370	461	99.5	30.34	749.0	-21.57	EXP	No	Yes

[a] Facilities or sources that operate only during the October 1 through April 30 crop season (212 days).

[b] Sugar mill sources that operate all year.

[c] Represents worst case emissions for May 1-September 30 off-crop season operation, and October 1-April 30 for on-crop season.

Note: EXP = PSD expanding source.
CON = PSD consuming source.
NO = Source does not affect PSD increment.
ND = No data available.

TABLE B-9
SUMMARY OF SO_2 EMITTING FACILITIES INCLUDED IN THE PSD CLASS I INCREMENT CONSUMPTION ANALYSIS
AT THE EVERGLADES NP FOR THE U.S. SUGAR BRYANT MODELING PROTOCOL

Plant ID	Facility Name	County	UTM Coordinates East (km)	UTM Coordinates North (km)	Relative to Everglades NP [a] X (km)	Relative to Everglades NP [a] Y (km)	Relative to Everglades NP [a] Direction (deg.)	Relative to Everglades NP [a] Distance (km)	Maximum SO_2 Emissions (TPY)
0250003	FPL Turkey Point Expansion	Dade	567.2	2813.2	56.5	0.8	89.2	56.5	39,989
0250348	Miami-Dade County Resource Recovery	Miami-Dade	563.8	2857.6	53.1	45.2	49.6	69.7	857
0250020	Tarmac - Pennsuco Cement Plant	Dade	562.9	2861.7	52.2	49.3	46.7	71.8	2,792
0250020	Tarmac - Pennsuco Cement Plant	Dade	562.9	2861.7	52.2	49.3	46.7	71.8	-493
7775212	Weekley Asphalt Paving, Inc.	Collier	557.3	2880.6	46.6	68.2	34.4	82.6	60
0112410	SFWMD - Pump Stations S-9/S-9A	Broward	555.9	2882.2	45.2	69.8	33.0	83.1	49
0112149	Fred Hunter's Memorial Services, Inc.	Broward	578.6	2878.5	67.9	66.1	45.8	94.8	1.00
0112119	Wheelabrator South Broward, Inc.	Broward	578.9	2883.4	68.2	70.9	43.9	98.4	462
0110037	FPL - Fort Lauderdale	Broward	579.4	2883.4	68.7	70.9	44.1	98.8	1,715
0110037	FPL - Fort Lauderdale	Broward	579.4	2883.4	68.7	70.9	44.1	98.8	-15,886
0210090	Calumet Florida L.L.C.	Collier	470.1	2904.2	-40.6	91.8	336.1	100.4	5.45
0110351	SFWMD - Pump Stations S-8/G-404	Broward	522.3	2912.3	11.6	99.8	6.6	100.5	20.6
0210018	Florida Rock Industries	Collier	467.8	2905.8	-42.9	93.4	335.3	102.7	3.10
0110036	FPL -Port Everglades	Broward	587.4	2885.3	76.7	72.9	46.5	105.8	170,215
7774818	Better Roads, Inc. - Naples Asphalt Plant	Collier	432.5	2889.7	-78.2	77.3	314.7	109.9	52.6
0210051	Waste Management Inc. of Florida	Collier	434.6	2893.2	-76.1	80.8	316.7	111.0	938
0210039	Collier County Domestic Animal Services	Collier	429.3	2891.3	-81.3	78.9	314.1	113.3	3.29
0210023	Apac-Southeast, Inc. - Naples Ashpalt Plant	Collier	429.2	2898.8	-81.5	86.4	316.7	118.7	97.0
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	72.4	95.5	37.2	119.8	166
0112120	Wheelabrator North Broward, Inc.	Broward	583.6	2907.6	72.9	95.2	37.5	119.9	896
0210045	Naples Community Hospital	Collier	420.2	2892.5	-90.5	80.1	311.5	120.8	39.2
0990005	Okeelanta Corp.	Palm Beach	525.0	2937.4	14.3	125.0	6.5	125.8	37.0
0990005	Okeelanta Corp.	Palm Beach	525.0	2937.4	14.3	125.0	6.5	125.8	-333.6
0990332	New Hope Power (Okeelanta)	Palm Beach	524.1	2940.0	13.4	127.6	6.0	128.3	1,035
0710236	Bonita Springs Utilities, Inc.	Lee	424.1	2915.0	-86.6	102.6	319.8	134.2	14.9
0990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	42.2	132.8	17.6	139.3	555
0990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	42.2	132.8	17.6	139.3	-2,342
0710193	Calumet Florida LLC	Lee	442.6	2937.2	-68.1	124.7	331.4	142.1	10.7
0990026	Sugar Cane Growers Coop.	Palm Beach	534.9	2953.3	24.2	140.9	9.8	142.9	2,083
0990026	Sugar Cane Growers Coop.	Palm Beach	534.9	2953.3	24.2	140.9	9.8	142.9	-15,214
0710187	APAC-Southeast, Inc. - Lee County Asphalt Plant	Lee	428.0	2930.4	-82.6	117.9	325.0	144.0	65.2
0510003	U.S. Sugar - Clewiston	Hendry	506.1	2956.9	-4.6	144.5	358.2	144.5	1,742
0510003	U.S. Sugar - Clewiston	Hendry	506.1	2956.9	-4.6	144.5	358.2	144.5	-5,917
0710065	APAC-Southeast, Inc. - Fort Myers Plant	Lee	424.3	2930.2	-86.4	117.8	323.7	146.0	90.3
ND	Glades Electric Cooperative	Glades	487.1	2957.5	-23.6	145.0	350.8	146.9	242
0510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-23.1	145.2	351.0	147.0	491
0510004	A. Duda & Sons, Inc. / Citrus Belle	Hendry	456.4	2950.3	-54.3	137.9	338.5	148.1	142
0990349	SFWMD - Pump Station S-5A	Palm Beach	562.6	2951.3	51.9	138.9	20.5	148.3	17.5
ND	FPL West County Energy Center	Palm Beach	562.2	2953.0	51.5	140.6	20.1	149.7	571
0710171	Amerimix Industries, Inc.	Lee	415.5	2931.0	-95.1	118.5	321.2	152.0	95.6
0990530	Hubbard Construction Company	Palm Beach	562.1	2955.6	51.5	143.1	19.8	152.1	47.6
0990045	Lake Worth Utilities	Palm Beach	592.8	2943.7	82.1	131.3	32.0	154.8	7,415
0990087	Ranger Construction Industries, Inc.	Palm Beach	579.9	2951.7	69.2	139.3	26.4	155.5	94.1
0430008	Atlas-Transoil Inc.	Glades	489.2	2966.6	-21.5	154.2	352.1	155.6	46.7
0990310	Community Asphalt Corp	Palm Beach	582.3	2950.8	71.6	138.4	27.4	155.8	137
0710133	Waste Management, Inc. of Florida	Lee	425.0	2942.8	-85.7	130.4	326.7	156.0	54.7
0990021	United Technologies Corporation (Pratt & Whitney Air	Palm Beach	562.0	2960.0	51.3	147.6	19.2	156.2	571
0710119	Lee County Resource Recovery	Lee	424.2	2945.7	-86.5	133.3	327.0	158.8	327
0990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	27.2	156.7	9.8	159.0	1,141
0990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	27.2	156.7	9.8	159.0	-3,806
0990019	Osceola Farms	Palm Beach	544.2	2968.0	33.5	155.6	12.2	159.1	640
0990019	Osceola Farms	Palm Beach	544.2	2968.0	33.5	155.6	12.2	159.1	-1,469
0710004	Gulf Paving Co.	Lee	415.2	2944.1	-95.5	131.7	324.1	162.6	85.2
0710002	FPL - Fort Myers	Lee	422.1	2952.9	-88.6	140.5	327.8	166.0	21,225
0710002	FPL - Fort Myers	Lee	422.1	2952.9	-88.6	140.5	327.8	166.0	-66,725
0990234	Palm Beach County Resource Recovery	Palm Beach	585.8	2960.5	75.1	148.0	26.9	166.0	1,533
0990042	FPL -Riviera Beach	Palm Beach	594.2	2960.6	83.5	148.2	29.4	170.1	73,475
7770048	Better Roads, Inc.	Charlotte	425.0	2963.3	-85.7	150.9	330.4	173.5	29.0
0150028	Ajax Paving Industries - Tuckers Corner	Charlotte	422.7	2963.9	-88.0	151.5	329.9	175.1	74.6
0850102	Indiantown Cogeneration L.P.	Martin	545.6	2991.5	34.9	179.1	11.0	182.4	2,566
0850001	FPL - Martin	Martin	543.1	2992.9	32.4	180.5	10.2	183.3	63,179
0150002	Asphalt Developers	Charlotte	400.7	2977.6	-110.0	165.2	326.3	198.4	37.8
0550014	Better Roads, Inc.	Highlands	465.6	3008.7	-45.1	196.3	347.1	201.4	52.7
0550005	Georgia Pacific Corp.	Highlands	467.0	3009.2	-43.7	196.8	347.5	201.6	59.2
0930001	Okeechobee Asphalt	Okeechobee	516.1	3014.2	5.4	201.8	1.5	201.8	105
0850021	Stuart Contracting	Martin	575.2	3006.8	64.5	194.4	18.4	204.8	100
0930109	BP Technology Inc.	Okeechobee	525.2	3017.4	14.5	205.0	4.1	205.5	15.8
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	40.2	205.7	11.1	209.6	76.0
0270016	DeSoto County Generating Company, LLC	DeSoto	419.8	3011.5	-90.9	199.1	335.5	218.8	119
1110004	Tropicana Products, Inc.	St. Lucie	559.6	3028.3	48.9	215.9	12.8	221.4	21.8
0270003	Peace River Citrus Products	Desoto	409.8	3010.1	-100.9	197.7	333.0	221.9	85.8
1110010	Dickerson Florida, Inc.	St. Lucie	562.2	3030.4	51.6	217.9	13.3	223.9	83.4
1110107	Treasure Coast Land Clearing	St. Lucie	545.7	3035.2	35.0	222.8	8.9	225.5	15.0
0550018	TECO - Phillips Station	Highlands	464.3	3035.4	-46.4	223.0	348.3	227.7	4,046
1110060	Florida Gas Transmission Company	St. Lucie	557.2	3035.8	46.6	223.3	11.8	228.1	10.6
1110003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	56.1	223.9	14.1	230.8	1,629
0550004	TECO - Sebring/Dinner Lake	Highlands	456.8	3042.5	-53.9	230.1	346.8	236.3	-1314
0550003	Progress Energy - Avon Park	Highlands	451.4	3050.5	-59.3	238.1	346.0	245.3	5,054
0490043	Vandolah Power Company, LLC	Hardee	408.8	3044.5	-101.9	232.1	336.3	253.4	221

[a] The approximate center of the Everglades National Park is located at UTM Coordinates: East 510.7 km; North 2812.4 km

ND = No Data

TABLE B-10
SUMMARY OF SO_2 SOURCES INCLUDED IN THE AIR MODELING FOR THE PSD CLASS I INCREMENT CONSUMPTION ANALYSES AT THE EVERGLADES NP
U.S. SUGAR BRYANT MODELING PROTOCOL

Facility ID	Facility Name / Emission Unit Description	Model ID Name	UTM Location East (km)	UTM Location North (km)	Stack Parameters Height ft	Height m	Diameter ft	Diameter m	Temperature °F	Temperature K	Velocity ft/s	Velocity m/s	SO_2 Emission Rate (lb/hr)	SO_2 Emission Rate (g/sec)	PSD Source? [a] (EXP/CON)	Modeled PSD Source?
0250003	FPL Turkey Point Expansion															
	100%L/35F, NG w/DF	FPLTURPT	567.2	2813.2	130.9	39.90	19.0	5.79	188.3	360.0	61.0	18.60	53.0	6.68	CON	Yes
0250348	Miami-Dade County Resource Recovery															
	Units 1, 2, 3, & 4	MDCRRF	564.3	2857.4	250.0	76.20	8.5	2.59	300.0	422.0	66.7	20.33	195.6	24.65	CON	Yes
0250020	Tarmac - Pennsuco Cement Plant															
	Kiln 1 PSD Baseline	TARMK1B	562.9	2861.7	200.1	61.00	8.0	2.44	377.3	465.0	42.1	12.84	-45.3	-5.71	EXP	Yes
	Kiln 2 PSD Baseline	TARMK2B	562.9	2861.7	200.1	61.00	8.0	2.44	377.3	465.0	42.1	12.84	-45.3	-5.71	EXP	Yes
	Kiln 3 PSD Baseline [a]	TARMK3B	562.9	2861.7	200.1	61.00	15.0	4.57	389.9	472.0	35.4	10.78	-21.9	-2.76	EXP	Yes
	Raw Mill and Pyroprocessing	TARMKRMP	562.9	2861.7	420.00	128	14.0	4.27	294.0	418.71	55.8	17.00	320.0	40.32	CON	Yes
7775212	Weekley Asphalt Paving, Inc.															
	Asphalt Drum Mix Plant and Asphalt Cement Heater	WAPAV	557.3	2880.6	27.0	8.23	3.3	0.99	275.0	408.2	93.8	28.59	13.6	1.71	CON	Yes
0112410	SFWMD - Pump Stations S-9/S-9A															
	Five Diesel Engines	SFWMPS9A	555.9	2882.2	28.0	8.53	1.2	0.36	735.0	663.7	135.2	41.21	11.2	1.41	CON	Yes
0112149	Fred Hunter's memorial Services, Inc.															
	150 LB/HR CREMATOR IE43-IIPP	FHUNT1	578.6	2878.5	20.0	6.10	1.7	0.52	700.0	644.3	24.0	7.32	0.6	0.08	CON	Yes
	IE43-ET CREMATION INCINERATOR	FHUNT2	578.6	2878.5	20.0	6.10	1.7	0.52	200.0	366.5	30.0	9.14	0.1	0.01	CON	Yes
0112119	Wheelabrator South Broward, Inc.															
	MSW Combustor & Auxiliary Burners- Units 1, 2, & 3	SBCRRF	578.9	2883.4	194.8	59.40	13.0	3.96	226.1	381.0	59.1	18.01	105.3	13.27	CON	Yes
0110037	FPL - Ft. Lauderdale															
	CTs 1-4 PSD	LAUDU45	580.1	2883.3	149.9	45.70	18.0	5.49	330.0	438.7	47.9	14.60	2,152.0	271.15	CON	Yes
	GT 1-12 (0.5%S Fuel Oil)	LDGT1_12	580.1	2883.3	44.9	13.70	7.8	2.37	860.1	733.2	374.9	114.31	4,387.3	552.80	NO	No
	GT 13-24 (0.5%S Fuel Oil)	LDGT1324	580.1	2883.3	44.0	13.40	15.6	4.75	860.1	733.2	93.3	28.43	4,387.3	552.80	NO	No
	4&5 PSD Baseline	FTLAU45B	580.1	2883.3	150.9	46.00	14.0	4.27	299.9	422.0	48.0	14.63	-3,627.0	-457.00	EXP	Yes
0110351	SFWMD - Pump Stations S-8/G-404															
	Five diesel engines	SFWMDS8	522.3	2912.3	12.0	3.66	2.0	0.61	660.0	622.0	31.6	9.63	4.8	0.60	CON	Yes
0210018	Florida Rock Industries															
	Diesel engine drives for crushers, conveyers, screens, etc.	FLROCK2	467.8	2905.8	12.0	3.66	ND	ND	300.0	422.0	ND	ND	2.1	0.26	CON	Yes
0110036	FPL - Port Everglades															
	Units 1&2 at 2.5%S Fuel Oil	PTEVU12	587.4	2885.3	342.8	104.50	14.0	4.27	289.0	415.9	87.7	26.72	12,650.0	1,593.90	NO	No
	Units 3&4 at 2.5%S Fuel Oil	PTEVU34	587.4	2885.3	342.8	104.50	18.1	5.52	287.0	414.8	78.3	23.88	22,000.0	2,772.00	NO	No
	GT 1-12 at 0.5%S Fuel Oil)	PTEVGTS	587.4	2885.3	44.0	13.40	15.6	4.75	860.1	733.2	93.3	28.43	4,211.9	530.70	NO	No
7774818	Better Roads, Inc. - Naples Plant															
	Asphalt Plant & Concrete, Asphalt, & Rock Crushing Machine	BRINAP	432.5	2889.7	35.0	10.67	4.3	1.31	320.0	433.2	51.6	15.73	26.7	3.36	CON	Yes
0210039	Collier County Domestic Animal Services															
	Crematory, Animal Crawford Equipment & Engineering C-1000p	CCDAS	429.3	2891.3	16.0	4.88	2.0	0.61	1032.0	828.7	27.2	8.29	0.8	0.09	CON	Yes
0210023	APAC-Southeast, Inc. - Naples Asphalt Plant															
	Asphalt Plant With Baghouse Collector	APACNAP1	429.2	2898.8	34.0	10.36	5.5	1.68	260.0	399.8	42.0	12.80	94.2	11.87	CON	Yes
	Astec Double Barrel Asphalt Concrete Plant Baghouse	APACNAP7	429.2	2898.8	35.0	10.67	4.0	1.22	300.0	422.0	90.2	27.49	3.0	0.38	CON	Yes
0112120	Wheelabrator North Broward, Inc.															
	Main Stack (All boilers operating)	NBRRF	583.6	2907.6	195.0	59.44	15.0	4.57	300.0	422.0	63.8	19.45	131.2	16.53	CON	Yes
0210045	Naples Community Hospital															
	Boiler Cleaver Brooks Model CB200-250 9.881 MMBtu/hr	NCHB2	420.2	2892.5	6.0	1.83	0.6	0.18	439.0	499.1	251.7	76.72	4.5	0.56	CON	Yes
	Boiler Cleaver Brooks Model CB200-250 9.881 MMBtu/hr	NCHB3	420.2	2892.5	6.0	1.83	0.6	0.18	439.0	499.1	251.7	76.72	4.5	0.56	CON	Yes
0990332	New Hope Power (Okeelanta)															
	Okeelanta Power Blrs 1,2,3 [b]	OKCOGENF	524.1	2940.0	199.0	60.66	10.0	3.05	352.0	450.9	63.6	19.39	456.0	57.46	CON	Yes
0990005	Okeelanta Corp. [a]															
	Boiler 4 PSD Baseline	OKBLR4B	525.0	2937.4	75.0	22.86	7.5	2.29	139.7	333.0	24.1	7.36	-86.9	-10.95	EXP	Yes
	Boiler 5 PSD Baseline	OKBLR5B	525.0	2937.4	75.0	22.86	7.5	2.29	139.7	333.0	39.6	12.07	-124.1	-15.64	EXP	Yes
	Boiler 6 PSD Baseline	OKBLR6B	525.0	2937.4	75.0	22.86	7.5	2.29	141.5	334.0	28.7	8.74	-124.1	-15.64	EXP	Yes
	Boiler 10 PSD Baseline	OKBLR10B	525.0	2937.4	75.0	22.86	7.5	2.29	141.5	334.0	33.9	10.35	-136.1	-17.15	EXP	Yes
	Boiler 11 PSD Baseline	OKBLR11B	525.0	2937.4	75.0	22.86	7.5	2.29	155.9	342.0	32.4	9.89	-133.3	-16.79	EXP	Yes
	Boilers 4-11 PSD baseline	OKBLRB	525.0	2937.4	75.0	22.86	7.5	2.29	139.7	333.0	24.1	7.36	-604.5	-76.17	EXP	Yes
	Boiler 16 PSD [b]	OKBLR16	525.0	2937.4	75.0	22.86	5.0	1.52	409.7	483.0	74.9	22.83	12.1	1.52	CON	Yes
0710236	Bonita Springs Utilities, Inc.															
	Sewage Sludge Dryer	BSUTIL	424.1	2915.0	39.0	11.89	1.7	0.52	125.0	324.8	98.4	29.99	3.4	0.43	CON	Yes
0990016	Atlantic Sugar Association [a]															
	Unit 1	ATLSUG1	552.9	2945.2	90.0	27.43	6.0	1.83	180.0	355.4	61.1	18.63	67.0	8.44	CON	Yes
	Unit 2	ATLSUG2	552.9	2945.2	90.0	27.43	6.0	1.83	180.0	355.4	60.1	18.32	67.0	8.44	CON	Yes
	Unit 3	ATLSUG3	552.9	2945.2	90.0	27.43	6.0	1.83	197.0	364.8	59.7	18.20	65.8	8.29	CON	Yes
	Unit 4	ATLSUG4	552.9	2945.2	90.0	27.43	6.0	1.83	158.0	343.2	62.7	19.12	65.5	8.25	CON	Yes
	Units 1-4	ATLSUG14	552.9	2945.2	90.0	27.43	6.0	1.83	158.0	343.2	59.7	18.20	265.3	33.43	CON	Yes
	Unit 5 PSD [b]	ATLSUG5	552.9	2945.2	90.0	27.43	5.5	1.68	150.5	339.0	53.3	16.25	48.4	6.10	CON	Yes
	Baseline															
	Unit 1 PSD Baseline	ATLSUG1B	552.9	2945.2	62.0	18.90	6.3	1.92	451.1	506.0	41.7	12.70	-136.8	-17.24	EXP	Yes
	Unit 2 PSD Baseline	ATLSUG2B	552.9	2945.2	62.0	18.90	6.3	1.92	460.1	511.0	35.8	10.90	-178.6	-22.50	EXP	Yes
	Unit 3 PSD Baseline	ATLSUG3B	552.9	2945.2	71.8	21.90	6.0	1.83	479.9	522.0	57.4	17.50	-134.0	-16.88	EXP	Yes
	Unit 4 PSD Baseline	ATLSUG4B	552.9	2945.2	60.0	18.30	6.0	1.83	159.5	344.0	49.2	15.00	-85.4	-10.76	EXP	Yes
0990026	Sugar Cane Growers Coop. [c]															
	On-crop season															
	Unit 1	SCRBLR1N	534.9	2953.3	150.0	45.72	7.0	2.13	156.0	342.0	39.0	11.89	603.1	75.99	CON	Yes
	Unit 2	SCRBLR2N	534.9	2953.3	150.0	45.72	7.0	2.13	156.0	342.0	39.6	12.07	603.1	75.99	CON	Yes
	Unit 3	SCRBLR3N	534.9	2953.3	180.0	54.86	5.3	1.62	156.0	342.0	40.3	12.28	412.8	52.01	CON	NO
	Unit 4	SCRBLR4N	534.9	2953.3	180.0	54.86	8.9	2.72	162.0	345.4	48.0	14.63	1,031.9	130.02	CON	NO
	Unit 5	SCRBLR5N	534.9	2953.3	150.0	45.72	7.0	2.13	160.0	344.3	77.1	23.50	792.8	98.89	CON	NO
	Unit 8	SCRBLR8N	534.9	2953.3	155.0	47.24	9.5	2.90	154.0	340.9	37.6	11.46	394.4	49.69	CON	NO
	Note: Only SCRBLR1N and SCRBLR2N were modeled due to 14 TPD limit.															
	Off-crop season															
	Unit 1	SCRBLR1F	534.9	2953.3	150.0	45.72	7.0	2.13	156.0	342.0	39.0	11.89	603.1	75.99	CON	Yes
	Unit 4	SCRBLR4F	534.9	2953.3	180.0	54.86	8.9	2.72	162.0	345.4	48.0	14.63	1,031.9	130.02	CON	NO
	Baseline															
	BOILER #1 PSD Baseline Off-crop season	SCRBLR1BF	534.9	2953.3	79.1	24.10	5.5	1.68	395.0	474.8	52.3	15.94	-236.2	-29.80	EXP	Yes
	BOILER #2 PSD Baseline Off-crop season	SCRBLR2BF	534.9	2953.3	79.1	24.10	5.5	1.68	405.1	480.4	58.6	17.88	-236.2	-29.80	EXP	Yes
	BOILER #3 PSD Baseline Off-crop season	SCRBLR3BF	534.9	2953.3	79.1	24.10	5.5	1.68	470.0	516.5	54.1	16.50	-177.6	-22.40	EXP	Yes
	Boilers 1-3 PSD Baseline off-Crop	SCRBLR123BF	534.9	2953.3	79.1	24.10	5.5	1.68	395.0	474.8	52.3	15.94	-650.0	-82.00	EXP	Yes
	BOILER #4 PSD Baseline Off-crop season	SCRBLR4BF	534.9	2953.3	86.0	26.20	5.3	1.62	149.1	338.2	32.4	9.88	-205.6	-25.91	EXP	Yes
	BOILER #5 PSD Baseline Off-crop season	SCRBLR5BF	534.9	2953.3	79.1	24.10	6.7	2.03	490.0	527.6	93.2	28.42	-315.0	-39.69	EXP	Yes
	BOILER #6 PSD Baseline Off-crop season	SCRBLR6BF	534.9	2953.3	40.0	12.20	5.0	1.52	630.1	605.4	21.4	6.53	-147.7	-18.61	EXP	Yes
	BOILER #7 PSD Baseline Off-crop season	SCRBLR7BF	534.9	2953.3	40.0	12.20	5.0	1.52	630.4	605.6	56.4	17.20	-353.8	-44.58	EXP	Yes
	BOILER #1 PSD Baseline On-crop season	SCRBLR1BN	534.9	2953.3	79.1	24.10	5.5	1.68	395.0	474.8	52.3	15.94	-149.8	-18.87	EXP	Yes
	BOILER #2 PSD Baseline On-crop season	SCRBLR2BN	534.9	2953.3	79.1	24.10	5.5	1.68	405.1	480.4	58.6	17.88	-149.8	-18.87	EXP	Yes
	BOILER #3 PSD Baseline On-crop season	SCRBLR3BN	534.9	2953.3	79.1	24.10	5.5	1.68	470.0	516.5	54.1	16.50	-112.4	-14.16	EXP	Yes
	Boilers 1-3 PSD Baseline On-Crop	SCRBLR123BN	534.9	2953.3	79.1	24.10	5.5	1.68	395.0	474.8	52.3	15.94	-412.0	-51.91	EXP	Yes
	BOILER #4 PSD Baseline On-crop season	SCRBLR4BN	534.9	2953.3	86.0	26.20	5.3	1.62	149.1	338.2	32.4	9.88	-205.6	-25.91	EXP	Yes
	BOILER #5 PSD Baseline On-crop season	SCRBLR5BN	534.9	2953.3	79.1	24.10	6.7	2.03	490.0	527.6	93.2	28.42	0.0	0.00	EXP	Yes
	BOILER #6 PSD Baseline On-crop season	SCRBLR6BN	534.9	2953.3	40.0	12.20	5.0	1.52	630.1	605.4	21.4	6.53	0.0	0.00	EXP	Yes
	BOILER #7 PSD Baseline On-crop season	SCRBLR7BN	534.9	2953.3	40.0	12.20	5.0	1.52	630.4	605.6	56.4	17.20	-121.8	-15.35	EXP	Yes
0510003	U.S. Sugar - Clewiston															
	PSD Baseline (On-crop)															
	Unit 1 PSD Baseline	USSBLR1B	506.1	2956.9	75.8	23.10	6.1	1.86	160.0	344.3	99.0	30.18	-462.0	-58.21	EXP	Yes
	Unit 2 PSD Baseline	USSBLR2B	506.1	2956.9	75.8	23.10	6.1	1.86	158.0	343.2	117.0	35.66	-462.0	-58.21	EXP	Yes
	Unit 3 PSD Baseline	USSBLR3B	506.1	2956.9	90.0	27.43	7.5	2.29	156.0	342.0	48.2	14.69	-263.5	-33.20	EXP	Yes
	East Pellet Plant PSD Baseline	EPELLETB	506.1	2956.9	40.0	12.19	5.0	1.52	165.0	347.0	28.0	8.53	-81.7	-10.29	EXP	Yes
	West Pellet Plant PSD Baseline	WPELLETB	506.1	2956.9	51.5	15.70	5.0	1.52	165.0	347.0	28.0	8.53	-81.7	-10.29	EXP	Yes

TABLE B-10
SUMMARY OF SO_2 SOURCES INCLUDED IN THE AIR MODELING FOR THE PSD CLASS I INCREMENT CONSUMPTION ANALYSES AT THE EVERGLADES NP
U.S. SUGAR BRYANT MODELING PROTOCOL

Facility ID	Facility Name / Emission Unit Description	Model ID Name	UTM Location East (km)	UTM Location North (km)	Stack Parameters Height ft	Height m	Diameter ft	Diameter m	Temperature °F	Temperature K	Velocity ft/s	Velocity m/s	SO_2 Emission Rate (lb/hr)	SO_2 Emission Rate (g/sec)	PSD Source? [a] (EXP/CON)	Modeled PSD Source?
0510015	Southern Gardens Citrus															
	Boiler #1	SGARD01	487.6	2957.6	55.0	16.76	4.0	1.22	400.0	477.6	46.7	14.23	1.8	0.22	CON	Yes
	Boiler #2	SGARD02	487.6	2957.6	55.0	16.76	4.0	1.22	400.0	477.6	46.7	14.23	1.8	0.22	CON	Yes
	Boiler #3	SGARD08	487.6	2957.6	55.0	16.76	4.0	1.22	400.0	477.6	46.7	14.23	1.9	0.24	CON	Yes
	Boiler #4	SGARD10	487.6	2957.6	55.0	16.76	4.0	1.22	400.0	477.6	46.7	14.23	0.3	0.04	CON	Yes
	Boilers 1-4	SGARDBLR	487.6	2957.6	55.0	16.76	4.0	1.22	400.0	477.6	46.7	14.23	5.8	0.73	CON	Yes
	Peel Dryer No. 2 with Waste Heat Evaporator	SGARD19	487.6	2957.6	125.0	38.10	5.7	1.74	109.0	315.9	24.4	7.44	10.5	1.32	CON	Yes
	Peel Dryer No. 1 with Waste Heat Evaporator	SGARD03	487.6	2957.6	125.0	38.10	5.7	1.74	109.0	315.9	24.4	7.44	10.5	1.32	CON	Yes
	Peel Dryers 1-2	SGARDDRY	487.6	2957.6	125.0	38.10	5.7	1.74	109.0	315.9	24.4	7.44	21.0	2.65	CON	Yes
0510004	A. Duda & Sons, Inc. / Citrus Belle															
	Boiler No. 2	DUDAB3	456.4	2950.3	40.0	12.19	2.5	0.76	400.0	477.6	36.0	10.97	18.9	2.38	CON	Yes
	Boiler No. 5	DUDAB7	456.4	2950.3	45.0	13.72	2.8	0.84	420.0	488.7	42.1	12.83	25.2	3.18	CON	Yes
ND	FPL West County Energy Center (WCEC)															
	2200Mw GE 7FB NG-Firing 100%L/35F	FPLWCEC	562.2	2953.0	149.0	45.42	19.0	5.79	188.7	360.2	61.9	18.86	112.0	14.11	CON	Yes
0990530	Hubbard Construction Company															
	Hot mix asphalt plant (175 TPH)	HUBB1	562.1	2955.6	25.0	7.62	3.1	0.94	328.0	437.6	92.6	28.22	38.1	4.80	CON	Yes
0990045	Lake Worth Utilities															
	Unit 3, S-3	LAKWTHU3	592.8	2943.7	113.0	34.44	7.0	2.13	292.7	418.0	51.5	15.70	832.0	104.83	NO	No
	Unit 4, S-4	LAKWTHU4	592.8	2943.7	115.0	35.05	7.5	2.29	293.1	418.2	55.8	17.00	1,072.0	135.07	NO	No
	Unit 5, S-5	LAKWTHU5	592.8	2943.7	75.0	22.86	10.0	3.05	406.1	481.0	91.2	27.80	109.0	13.73	CON	Yes
	HRSG, CT No.1	LAKWTHHR	592.8	2943.7	46.0	14.02	18.0	5.49	836.3	720.0	81.7	24.90	170.7	21.51	CON	Yes
0710119	Lee County Resource Recovery															
	Municipal Waste Combustion Units #1 & #2	LECORRF	424.2	2945.7	275.0	83.82	6.2	1.89	240.0	388.6	64.6	19.69	82.0	10.33	CON	Yes
0990061	U.S. Sugar - Bryant [b]															
	Unit 1 PSD Baseline	USSBRY1B	537.8	2969.1	65.0	19.81	5.5	1.68	430.0	494.3	145.3	44.30	-289.7	-36.50	EXP	Yes
	Unit 2&3 PSD Baseline	USBRY23B	537.8	2969.1	65.0	19.81	5.5	1.68	160.0	344.3	124.3	37.90	-579.4	-73.00	EXP	Yes
0990019	Osceola Farms [b]															
	Unit 2a,b	OSBLR2AB	544.2	2968.0	90.0	27.43	5.0	1.52	148.0	337.6	36.5	11.13	228.9	28.84	CON	Yes
	Unit 3	OSBLR3	544.2	2968.0	90.0	27.43	6.3	1.91	148.0	337.6	36.5	11.13	229.2	28.88	CON	Yes
	Unit 4	OSBLR4	544.2	2968.0	90.0	27.43	6.0	1.83	154.0	340.9	54.2	16.52	228.9	28.84	CON	Yes
	Unit 5a	OSBLR5A	544.2	2968.0	90.0	27.43	5.0	1.52	150.0	338.7	56.9	17.33	115.9	14.60	CON	Yes
	Unit 5b	OSBLR5B	544.2	2968.0	90.0	27.43	5.0	1.52	150.0	338.7	46.7	14.23	115.9	14.60	CON	Yes
	Unit 6	OSBLR6	544.2	2968.0	90.0	27.43	6.2	1.88	151.0	339.3	53.0	16.14	250.1	31.51	CON	Yes
	Units 2-6	OSBLR5B	544.2	2968.0	90.0	27.43	5.0	1.52	150.0	338.7	46.7	14.23	1,168.9	147.28	CON	Yes
	Baseline															
	Unit 1 PSD Baseline	OSBLR1B	544.2	2968.0	72.2	22.00	5.0	1.52	155.9	342.0	59.6	18.17	-40.2	-5.07	EXP	Yes
	Unit 2 PSD Baseline	OSBLR2B	544.2	2968.0	72.2	22.00	5.0	1.52	154.1	341.0	59.4	18.10	-129.5	-16.32	EXP	Yes
	Unit 3 PSD Baseline	OSBLR3B	544.2	2968.0	72.2	22.00	6.3	1.93	154.1	341.0	47.6	14.50	-57.6	-7.26	EXP	Yes
	Unit 4 PSD Baseline	OSBLR4B	544.2	2968.0	72.2	22.00	6.0	1.83	154.1	341.0	61.7	18.80	-108.0	-13.61	EXP	Yes
0710002	FPL - Fort Myers															
	Unit 1 PSD Baseline	FMU1	422.1	2952.9	301.1	91.80	9.5	2.90	299.9	422.0	98.1	29.90	-4,646.8	-585.50	EXP	Yes
	Unit 2 PSD Baseline	FMU2	422.1	2952.9	397.5	121.20	18.1	5.52	274.7	408.0	63.0	19.20	-10,587.3	-1,334.00	EXP	Yes
	HRSGs 1-6	FMYHR1_6	422.1	2952.9	125.0	38.10	19.0	5.79	220.0	377.6	46.6	14.20	30.6	3.86	CON	Yes
	Combustion Turbines 1-12	FMYCT112	422.1	2952.9	32.0	9.75	11.4	3.47	975.0	797.0	189.4	57.73	4,800.0	604.80	NO	No
	CTs 3A-3B	FMYCT3	422.1	2952.9	80.0	24.38	20.5	6.25	1116.0	875.4	120.7	36.79	206.2	25.98	CON	Yes
0990234	Palm Beach Resource Recovery															
	Units 1 and 2	PBCRRF	585.8	2960.5	249.9	76.20	6.7	2.04	449.7	505.2	81.7	24.90	91.6	11.55	CON	Yes
0990042	FPL - Riviera Beach															
	Units 3&4 at 2.5%S Fuel Oil	RIVU34	594.2	2960.6	298.0	90.83	16.0	4.88	263.0	401.5	62.0	18.90	17,930.0	2,259.18	NO	No
0990021	United Technologies Corporation (Pratt & Whitney Aircraft)															
	Air compressor/heater (ACHR-2-B2)	PRATACHR	562.0	2960.0	50.0	15.24	3.0	0.91	1000.0	810.9	471.6	143.78	111.0	13.99	CON	Yes
	Boiler BO-12, -1, -2, -14	PRATBO12	562.0	2960.0	15.0	4.57	2.5	0.76	500.0	533.2	22.7	6.92	0.1	0.01	CON	Yes
0850102	Indiantown Cogeneration L.P.															
	Pulverized Coal Main Boiler	INDTOWN1	545.6	2991.5	495.0	150.88	16.0	4.88	140.0	333.2	93.2	28.41	582.0	73.33	CON	Yes
	Auxiliary and Temporary Boilers	INDTOWN3	545.6	2991.5	210.0	64.01	5.0	1.52	350.0	449.8	87.6	26.70	18.0	2.27	CON	Yes
0850001	FPL - Martin															
	Units 1&2	MART12	543.1	2992.9	499.0	152.10	26.2	7.99	338.0	443.2	68.7	20.94	13,840.0	1,743.84	NO	No
	Units 3&4	MART34	543.1	2992.9	213.0	64.92	20.0	6.10	280.0	410.9	62.0	18.90	3,733.3	470.40	CON	Yes
	Aux Boiler	MARTAUX	543.1	2992.9	60.0	18.29	3.6	1.10	504.1	535.4	50.0	15.24	102.4	12.90	CON	Yes
	Diesel Genarator	MARTGEN	543.1	2992.9	25.0	7.62	1.0	0.30	955.0	785.9	130.0	39.62	4.0	0.51	CON	Yes
	Unit 8 (EUs 11, 12, 17, 18)	MART8OIL	543.1	2992.9	120.0	36.58	19.0	5.79	296.3	420.0	73.5	22.40	412.4	51.96	CON	Yes
0930001	Okeechobee Asphalt															
	100 TPH Asphalt Drum Mixer with Venturi Scrubber	OKEEASP	516.1	3014.2	20.0	6.10	3.4	1.02	250.0	394.1	20.8	6.34	23.9	3.01	CON	Yes
1110103	CPV Cana, LTD.															
	Combustion Turbine	CPVCANA	550.9	3018.1	169.9	51.80	18.5	5.64	285.0	413.7	78.6	23.96	99.0	12.47	CON	Yes
0270016	DeSoto County Generating Company, LLC															
	170MW Simple Cycle Comb Turbine Units 1 & 2	DCGEN	419.8	3011.5	75.0	22.86	23.0	7.01	1113.0	873.6	106.1	32.35	197.4	24.87	CON	Yes
0550018	TECO - Phillips Station															
	Diesel Generating Unit 1	TECOPH1	464.3	3035.4	150.0	45.72	6.0	1.83	335.0	441.5	79.0	24.09	460.0	57.96	CON	Yes
	Diesel Generating Unit 2	TECOPH2	464.3	3035.4	150.0	45.72	6.0	1.83	350.0	449.8	79.0	24.09	460.0	57.96	CON	Yes
1110003	Fort Pierce Utilities															
	Diesel Units 1 & 2	FPUD12	566.8	3036.3	23.0	7.01	3.0	0.91	950.0	783.2	39.0	11.89	30.0	3.78	CON	No
	CCGT Unit #9	FPUCCGT9	566.8	3036.3	68.0	20.73	11.2	3.41	426.0	492.0	59.8	18.23	319.5	40.26	CON	No
	Boiler #6	FPUB6	566.8	3036.3	148.0	45.11	5.0	1.52	325.0	435.9	36.0	10.97	2.5	0.32	NO	No
	Boiler #7 (Phase II Acid Rain Unit)	FPUB7	566.8	3036.3	147.0	44.81	7.1	2.16	308.0	426.5	61.1	18.62	2.5	0.32	NO	No
	Boiler #8 (Phase II Acid Rain Unit)	FPUB8	566.8	3036.3	150.0	45.72	8.0	2.44	334.0	440.9	83.6	25.48	2.5	0.32	CON	No
0550004	TECO-Sebring/Dinner Lake															
	Steam Boiler	TECOSEBR	456.8	3042.5	75.0	22.86	6.0	1.83	140.0	394.3	19.0	5.79	-299.9	-37.79	EXP	Yes
0550003	Progress Energy - Avon Park															
	Gas Turbine Peaking Unit No. 1	PEAVON3	451.4	3050.5	55.0	16.76	10.0	3.05	850.0	727.6	424.4	129.36	577.0	72.70	NO	No
	Gas Turbine Peaking Unit No. 2	PEAVON4	451.4	3050.5	55.0	16.76	10.0	3.05	850.0	727.6	424.4	129.36	577.0	72.70	NO	No
0490043	Vandolah Power Company, LLC															
	A 170 MW Gas Simple Cycle Combustion Turbines 1-4	VANDOLAH	408.8	3044.5	75.0	22.86	23.0	7.01	1113.0	873.6	106.1	32.34	394.8	49.74	CON	Yes
ND	Glades Electric Cooperative															
	Internal Combustion Engines- 6	GLADELEC	487.1	2957.5	13.0	3.96	0.8	0.25	940.0	777.6	437.5	133.35	55.3	6.97	CON	Yes

Note: EXP = PSD expanding source
CON = PSD consuming source
NO = Baseline Source, does not affect PSD increment
ND = No Data

[a] Facilities or sources within facilities that operate only during the October 1 through April 30 crop season.
[b] Sugar mill sources that operate all year.
[c] Facility-wide SO_2 emission limit of 14 tons/day (1,166.7 lb/hr). Only Boilers 1 and 4 operate during off-crop season.