

October 12, 2010

Ms. Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building,
2600 Blair Stone Road
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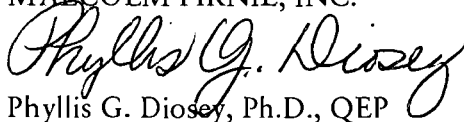
Re: Solid Waste Authority of Palm Beach County,
Palm Beach County Renewable Energy Facility No. 2
Air Quality Modeling Report for 1-hour NO₂ and SO₂ NAAQS

Dear Ms. Vielhauer:

The Solid Waste Authority of Palm Beach County (the Authority) is pleased to submit three copies of the *Air Quality Modeling Report for 1-hour NO₂ and SO₂ NAAQS* for the Palm Beach Renewable Energy Facility No. 2 (Proposed Facility, PBREF2). This report is being provided as requested in items 10 and 11 of the June 15, 2010 Request for Additional Information (RAI) from your office. This report describes the methodology and presents the results of the modeling analyses performed to address the new 1-hour National Ambient Air Quality Standards (NAAQS) for NO₂ and SO₂ for the Proposed Facility. In addition, each report includes a DVD that contains electronic copies of the modeling files that were used for the analyses.

If you have any questions concerning the report or the modeling analyses, please do not hesitate to contact me at (914) 641-2646 or via e-mail at pdiosey@pirnie.com.

Very truly yours,
MALCOLM PIRNIE, INC.



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Enclosures: Three (3) copies, *Air Quality Modeling Report for 1-hour NO₂ and SO₂ NAAQS*
For the Palm Beach County Renewable Energy Facility No. 2

3582056



Solid Waste Authority of Palm Beach County

7501 North Jog Road • West Palm Beach, FL 33412

Air Quality Modeling Report for 1-hour NO₂ and SO₂ NAAQS

Palm Beach Renewable Energy Facility No. 2

October 2010



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PIRNIÉ**

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1. Introduction and Background

The Solid Waste Authority of Palm Beach County (the Authority) filed a Prevention of Significant Deterioration (PSD) air permit application with the Florida Department of Environmental Protection (FDEP) for the Palm Beach County Renewable Energy Facility No. 2 (Proposed Facility, PBREF2) on May 10, 2010. The Proposed Facility will be a new 3,000 ton per day (tpd) mass burn waste-to-energy facility that will be constructed at the Authority's Palm Beach Renewable Energy Park in West Palm Beach, FL adjacent to its existing renewable energy facility, the North County Resource Recovery Facility (NCRRF).

As part of the PSD air permit application, refined atmospheric dispersion modeling was performed to demonstrate compliance with the Florida and National Ambient Air Quality Standards (FAAQS and NAAQS) for annual nitrogen dioxide (NO₂), 1-hour and 8-hour carbon monoxide (CO), 3-hour, 24-hour and annual sulfur dioxide (SO₂) and 24-hour and annual particulate matter (PM₁₀ and PM_{2.5}). This modeling was performed according to the *Air Quality Modeling Protocol* (Malcolm Pirnie, 2009) which was reviewed and approved by FDEP and the United States Environmental Protection Agency (USEPA), and the results of the analysis were presented in the *Air Quality Modeling Report* (Malcolm Pirnie, 2010a) submitted as part of the PSD permit application. The modeling demonstrated that impacts from the Proposed Facility were below all established significant impact levels (SILs), and therefore, would not cause or contribute to a violation of an ambient air quality standard or PSD increment, nor adversely affect air quality.

In a Request for Additional Information (RAI) (FDEP, 2010), FDEP requested that modeling be conducted to address the newly promulgated 1-hour NAAQS for NO₂ and SO₂. A modeling protocol was submitted to FDEP for review on August 23, 2010 (Malcolm Pirnie, 2010b). The protocol was subsequently revised and submitted to FDEP on September 8, 2010 to include the application of selective catalytic reduction (SCR) control technology (Malcolm Pirnie, 2010c). This air quality modeling report presents the results of the analyses described in the revised protocol, including the preliminary analyses for comparison to the proposed 1-hour SILs for NO₂ and SO₂, and a full, cumulative, multisource impact analysis for comparison to the 1-hour NO₂ standard. Modeling for the 1-hour standards reflects use of SCR control technology.

2. Applicable Air Quality Criteria

The analysis evaluates the impacts of NO₂ and SO₂ emissions from the Proposed Facility in comparison to the newly promulgated 1-hour standards. Following USEPA guidance (USEPA, 1990), a PSD air quality analysis consists of two distinct phases:

- a preliminary analysis to determine if project emissions will result in a significant impact on ambient air quality, and
- a full impact or multisource analysis that includes modeling emissions from the project and other existing sources. A full impact analysis is required for any pollutant where the estimated pollutant concentration exceeds the applicable SIL.

2.1. 1-Hour Nitrogen Dioxide (NO₂) Criteria

On January 25, 2010, the USEPA promulgated a new 1-hour NAAQS for NO₂ of 100 parts per billion (ppb) (40 CFR Part 50.11), effective as of April 12, 2010. The form of the new 1-hour NO₂ standard is the three year average of the 98th percentile of the annual distribution of daily maximum 1-hour concentrations.

In June 2010, USEPA provided guidance on demonstrating compliance with the 1-hour NO₂ standard (USEPA, 2010a), including the use of the tiered (Tiers 1, 2, and 3) screening approach (USEPA, 2010b). In addition, USEPA proposed an interim 1-hour NO₂ SIL of 4 ppb, which could be used in a preliminary analysis to determine if a source has the potential to cause or contribute to an exceedance of the standard. USEPA noted that the proposed 1-hour NO₂ SIL was a *non-binding* interim value which might change once formally promulgated. However, FDEP recommended using this interim SIL value for the following 1-hour air quality modeling analysis.

2.2. 1-Hour Sulfur Dioxide (SO₂) Criteria

On June 2, 2010, the USEPA promulgated a new 1-hour NAAQS for SO₂ of 75 ppb (40 CFR Part 50.4), effective on August 23, 2010. The form of the new 1-hour SO₂ standard is the three year average of the annual 99th percentile of 1-hour daily maximum concentrations.

In August 2010, USEPA provided guidance on demonstrating compliance with the 1-hour SO₂ standard, and in addition, proposed a *non-binding* interim 1-hour SO₂ SIL of 3 ppb, which be used in a preliminary analysis to determine if a source has the potential to cause or contribute to an exceedance of the standard (USEPA, 2010c). As recommended by FDEP, the following analysis will use this proposed SIL.

Table 2-1 summarizes the 1-hour NO₂ and SO₂ regulatory criteria which were applied to this 1-hour air quality modeling analysis.

**Table 2-1:
1-hour NO₂ and SO₂ NAAQS and Proposed SILs**

Pollutant	NAAQS		SIL	
	(ppb)	(µg/m ³)	(ppb)	(µg/m ³)
Nitrogen Dioxide (NO ₂)	100	189	4	7.6
Sulfur Dioxide (SO ₂)	75	195	3	7.8

Note:

1. Following discussions with FDEP, two significant figures were retained for the proposed SILs in units of µg/m³.

3. Methodology

The 1-hour NO₂ and SO₂ air quality impacts from the Proposed Facility were determined using the latest version of the USEPA AERMOD dispersion modeling system, with the model setup used for the PSD permit application modeling. This modeling system consists of three processors for estimating air quality impacts:

- AERMOD (version 09292) – Air dispersion model
- AERMAP (version 09040) – Elevation and terrain preprocessor
- AERMET (version 06341) – Meteorological data preprocessor

The AERMOD model requires four types of input:

- Source parameters (type, dimensions, location, flow and emission rates);
- Meteorological data (surface and profile data files);
- Receptor location (ground level and/or flagpole), fence line, simple, intermediate, and complex terrain grid receptors; and
- Model control options (land use/land cover, building wake information, regulatory control options, averaging time, etc.).

3.1. Facility Source Parameters

The NO₂ and SO₂ emission sources for the Proposed Facility include three MWC units. The MWC emissions are exhausted from a tall stack which contains three identical flues; one for each of the three identical MWC units. In addition, there will be one (1) 250 kilowatt (kW) diesel-fired emergency generator and two (2) 250 horsepower (hp) diesel-fired emergency fire water pump engines. Only one fire water pump would operate at a time, with one fire water pump used as back-up.

As noted in the revised 1-hour modeling protocol, the diesel generator and fire water pump engines are for emergency use only. These units will meet the following conditions:

1. The units will be used solely in the event of an emergency, when the other units onsite will not be operating.
2. Testing and maintenance of the emergency units will be limited to 100 hours per year. Since each routine test period will be approximately 30 minutes long, the 1-hour standard will not apply.

3. Under true emergency conditions, the emergency units will be operated as long as needed, but no longer than necessary.

Therefore, following guidance from FDEP, the emergency generator and the emergency fire water pumps were not included as emission sources for the 1-hour NO₂ and SO₂ modeling, and the 1-hour modeling analyses considered the emissions from the MWC units.

The model setup remained similar to the previous modeling performed for the PSD permit application except for the application of SCR NO_x emission control technology for the MWC units. Under the revised SCR design, the design stack exhaust velocity was increased, and the NO_x emission rate was significantly reduced. The exhaust parameters and emission rates used in the 1-hour NO₂ and SO₂ modeling analyses for the various operating loads are summarized in Table 3-1.

**Table 3-1:
Source Parameters and Emission Rates**

Source Parameter	Operating Load Scenarios					
	1a	1b	2	3a	3b	4
Stack height, feet (meters)	310 (94.5)					
Stack diameter, feet (meters)	13.5 (4.1)					
Exhaust temperature, °F (K)	285 (413.7)					
Exhaust velocity, meters/second	18.24	19.81	18.49	21.79	22.91	14.07
NO ₂ emission rate, grams/second	12.85	12.85	11.80	14.13	14.19	8.98
SO ₂ emission rate, grams/second	8.59	8.59	7.89	9.45	9.49	6.00

Notes:

1. Stack height is the height above base elevation.
2. Stack diameter is an effective stack diameter for a single merged stack based on the diameter of a stack with an area equivalent to the sum of the areas of the three identical flues.
3. Emission rates are the combined emission rates for all MWCs at 3,000 tons/day (for three 1,000 ton/day MWC units).
4. The emission rate for NO_x is the short-term rate based on an in-stack concentration of 50 ppmv NO_x for an SCR system.
5. The emission rate for SO₂ is the short-term rate based on an in-stack concentration of 24 ppmv SO₂.

Start-up and shut-down emissions were qualitatively assessed to determine if emissions that are generated outside of normal operations could potentially result in an adverse air quality impact. Scheduled start-up and shut down events for the MWC are relatively short in duration and are well-planned events. During these periods, the air pollution control equipment remains operational and pollutant emissions will remain within permitted limits. Therefore, operations during scheduled start-up and shut-down are not anticipated to be significantly different than the emissions evaluated for this modeling analysis.

3.2. Meteorological Data

The meteorological data used for this analysis were the same as the meteorological data used in the air quality modeling analysis for the PSD permit application. The meteorological data consisted of five years (2001 through 2005) of AERMOD-ready data provided by FDEP using hourly surface data from Palm Beach International Airport and upper air data from Florida International University in Miami.

3.3. Receptor Locations

The receptor data used for this analysis were the same as the receptor data used in the air quality modeling analysis for the PSD permit application. Receptor locations utilized a Cartesian grid network consisting of a 100 meter (m)-spaced grid out to 3 kilometers (km), a 500-m spaced grid from 3 km to 10 km, and a 1,000-m spaced grid from 10 km out to 30 km. As in the PSD application modeling, receptors around the Proposed Facility's fenceline, and grid receptors within the fenceline, were included in the model set-up.

3.4. Model Control Parameters

All model control options (i.e., surface characteristics, building wake information, and regulatory control options) remained the same as those used in the modeling conducted for the PSD permit application.

4. Preliminary Impact Analysis

A preliminary air dispersion modeling analysis was performed to estimate the 1-hour ambient air concentrations of NO₂ and SO₂ from the Proposed Facility for comparison to the proposed 1-hour NO₂ and SO₂ SILs and to determine whether a cumulative air quality impact analysis would be required for the Proposed Facility.

4.1. Worst-Case Load Analysis

As part of the preliminary impact analysis, a worst-case load analysis was first performed using AERMOD for each operating scenario shown in Table 3-1 to determine the operating load parameters and emission rates that would result in the highest average 1-hour impact. For the worst-case load analysis, a unitized emission rate of 1 gram per second (g/s) was used to produce normalized concentrations (µg/m³ per g/s). These normalized concentrations were then multiplied by the 1-hour emission rates for NO_x and SO₂ to determine the highest five-year average 1-hour predicted impacts. Following the guidance provided by USEPA (USEPA, 2010c,d), the highest of the five-year average of the maximum modeled 1-hour NO₂ and SO₂ concentrations predicted at each receptor was compared to the 1-hour NO₂ and SO₂ SILs, respectively. The results of the worst-case load analysis are presented in Table 4-1.

The 1-hour NO₂ modeling analysis used Tier 2, which applied a conversion factor of 0.75 to determine NO₂ impacts from emissions of NO_x. The use of the Tier 2 default value was based upon a review of historical ambient NO₂/NO_x ratios from a nearby monitoring location.

**Table 4-1:
Worst-Case Load Analysis Modeled Impacts**

Operating Load Scenario	Highest 5-year Average Unitized 1-hour Impact (µg/m ³ per g/s)	Highest 5-year Average 1-hour Impact (µg/m ³)	
		NO ₂	SO ₂
Scenario 1a	0.900	8.67	7.73
Scenario 1b	0.854	8.23	7.34
Scenario 2	0.893	7.90	7.05
Scenario 3a	0.800	8.48	7.56
Scenario 3b	0.770	8.20	7.31
Scenario 4	1.061	7.14	6.36

Notes:

1. Impacts predicted for a single merged flue representing three 1,000 tpd units.
2. Impacts in bolded font represent the overall maximum impact for each pollutant.
3. NO₂ impacts based on Tier 2 (ARM = 0.75).

4.2. Preliminary Impact Analysis

It was determined that the highest 5-year average 1-hour impact at any receptor for both pollutants occurred under Scenario 1a. Therefore, Scenario 1a was evaluated in this 1-hour modeling analysis. The results of the preliminary analysis in comparison to the 1-hour NO₂ and SO₂ SILs are presented in Table 4-2.

**Table 4-2:
Preliminary Impact Analysis**

Pollutant	Highest 5-year Average 1-hour Impact (µg/m ³)	Interim Proposed 1-hour Significant Impact Level (µg/m ³)	Less than SIL? (Yes/No)
NO ₂	8.7	7.6	No
SO ₂	7.7	7.8	Yes

Note: NO₂ impact based on Tier 2.

Since the highest 5-year average of the maximum modeled 1-hour NO₂ impact exceeded the interim proposed SIL, a full multisource impact analysis for the 1-hour NO₂ NAAQS was initiated. For SO₂, the highest 5-year average of the maximum modeled 1-hour SO₂ impact was below the interim proposed SIL and therefore, emissions from the Proposed Facility will not cause or contribute to a violation of the 1-hour SO₂ NAAQS. Thus, no further analysis was required. However, 1-hour SO₂ modeled impacts were compared to the 1-hour SO₂ NAAQS for informational purposes, as discussed below in Section 4.3.

4.3. 1-hour SO₂ NAAQS Comparison

Following USEPA guidance, the modeled 1-hour SO₂ impact (4th highest daily 1-hour maximum concentration averaged over 5 years) should be added to a representative background concentration for comparison to the 1-hour SO₂ NAAQS. The representative 1-hour SO₂ background concentration is 15.6 µg/m³, the highest first-high monitored value over the past 3 years of data (2007-2009) from the Riviera Beach monitoring station. Table 4-3 presents the most recent 1-hour SO₂ monitored background values obtained from the Riviera Beach monitoring location.

**Table 4-3:
1-hour SO₂ Background Air Quality**

Pollutant	Averaging Period	Monitoring Location	Monitored Concentration ppm (µg/m ³)		
			2007	2008	2009
SO ₂	1-hour	Riviera Beach	0.005 (13.0)	0.005 (13.0)	0.006 (15.6)

Source: AIRSDATA (Monitor ID 12099-30044240101)

As shown below in Table 4-4, the 1-hour SO₂ impact from the Proposed Facility combined with the ambient background level is well below the 1-hour SO₂ NAAQS.

**Table 4-4:
Comparison to the 1-hour SO₂ NAAQS**

4th Highest Daily 1-hour SO₂ Maximum 5-year Average Modeled Impact (µg/m³)	1-hour Background SO₂ (µg/m³)	1-hour Total SO₂ Impact (µg/m³)	1-hour SO₂ NAAQS (µg/m³)
7.1	15.6	22.7	195

5. Full Multisource Impact Analysis for NO₂

A cumulative, multisource impact analysis was performed for 1-hour NO₂ since the 1-hour impact exceeded the interim 1-hour SIL. The full impact multisource modeling analysis was performed to compare the combined impacts from the Proposed Facility and nearby sources to the 1-hour NAAQS for NO₂. The analysis used the AERMOD model and the methodology presented above in Section 3. The methodology and results of the full impact analysis are discussed below.

The emissions from the Proposed Facility and the emissions from the sources in the final inventory were modeled with AERMOD using the five years of meteorological data at the significant receptor locations.

The 8th highest daily 1-hour maximum concentration averaged over 5 years at each receptor (98th percentile) was used for comparing the impacts to the 1-hour NO₂ NAAQS. The 98th percentile impact was calculated using a commercial post-processing program (BREEZE software).

5.1. Source Inventory

“Nearby” sources to be included in the full impact analysis are defined as those sources within a circular area with a radius equal to the furthest distance to the SIL (i.e., the significant impact area, or SIA) plus 50 kilometers (USEPA, 1990). The radius of the SIA was conservatively based on the maximum, or highest first-high, 1-hour NO₂ impact from the five years of meteorological data from the worst-case load scenario, Scenario 1a, as determined from the preliminary impact analysis. Based on this, the SIA radius was determined to be 2.7 km. Figure 5-1 presents the geographic extent of the screening area for the multisource analysis.

The receptor locations for the full 1-hour NO₂ impact analysis were those receptor locations where the maximum, or highest first-highest, 1-hour NO₂ impact from the Proposed Facility was equal to or greater than the SIL. A modeled impact threshold of 7.55 µg/m³ was used for determining impacts that were equal to or greater than the SIL. A total of 116 receptor locations were identified as meeting this criterion; these receptor locations are shown in Figure 5-2.

Figure 5-1: Extent of SIA and Initial NO₂ Source Inventory

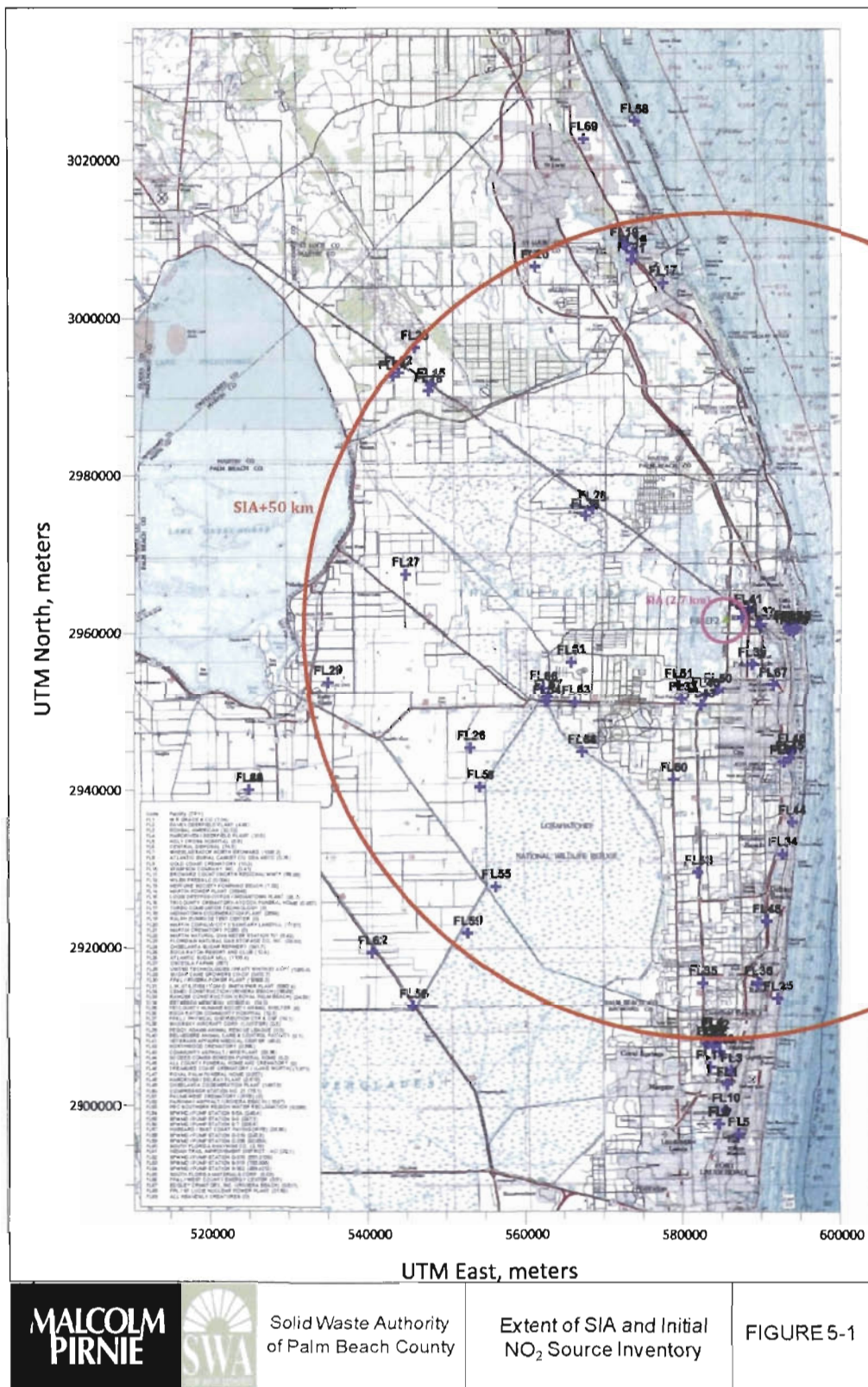
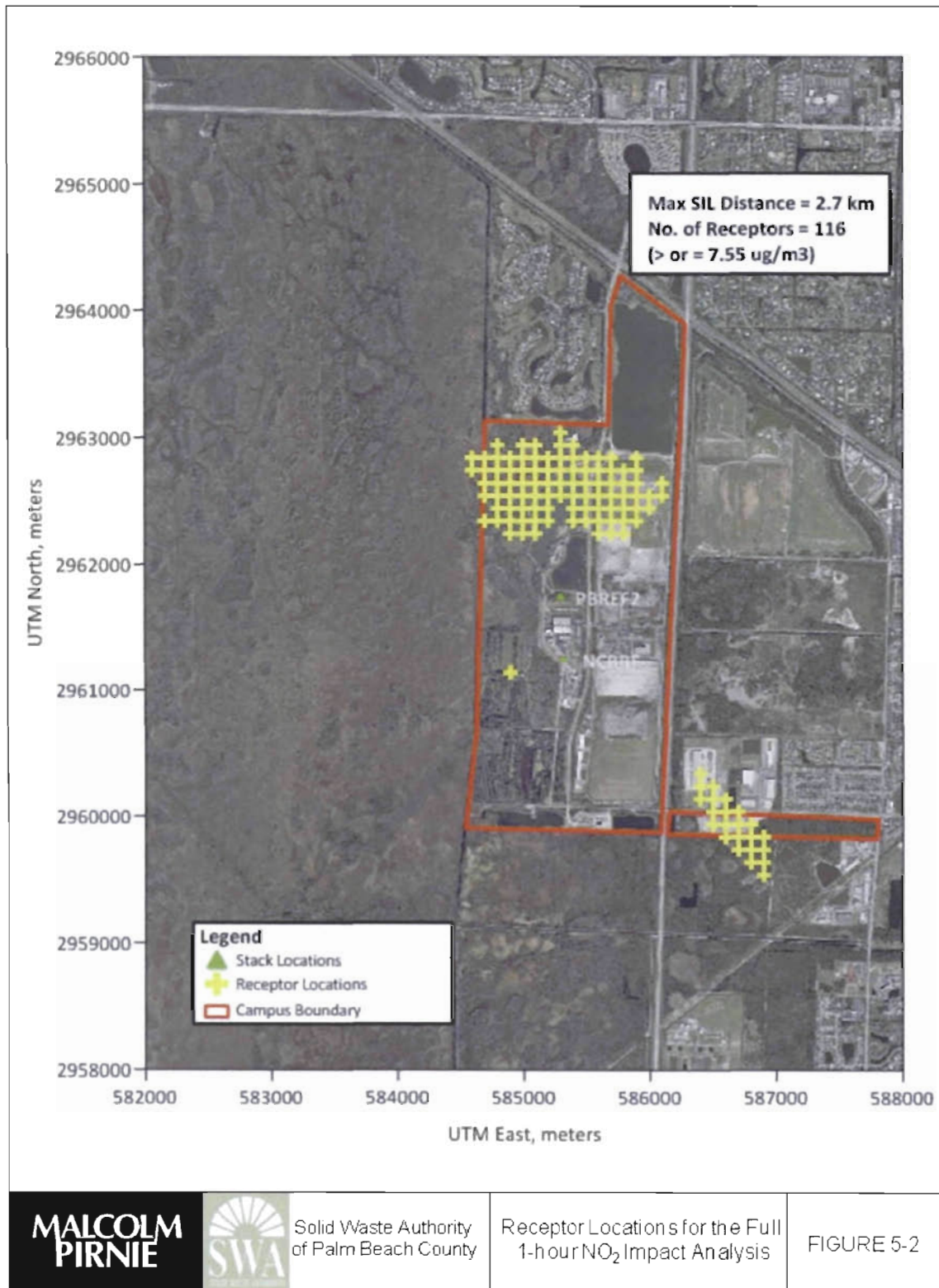


Figure 5-2: Receptor Locations for the Full 1-hour NO₂ Impact Analysis



Emission rates and source parameters for the inventory of nearby NO₂ sources within 70 km of the Proposed Facility stack location were supplied by FDEP. The inventory data were then screened to determine which facilities were to be included in the full impact analysis. Details of the inventory review and screening procedure are discussed below.

5.2. Inventory Screening Procedure

All facilities which were located within the SIA were included in the full impact analysis. Facilities located beyond the SIA plus 50 km were removed from further processing. Facilities beyond the SIA, but within the SIA plus 50 km, were evaluated for inclusion in the full impact analysis based on the 20D method developed by the North Carolina Department of Environment and Natural Resources (NCDNRCD, 1985). Following this method, facilities with short-term NO₂ emission rates (in tons per year) less than 20 times the distance (in km) from the emission source to the edge of the SIA ("D") were considered to have insignificant impacts within the SIA and were removed from the full impact analysis.

The remaining facilities (i.e., the facilities where the short-term emission rate was equal to or greater than 20D) were then further screened by modeling the facility sources with AERMOD and the five years of meteorological data to determine if any of the facility sources would have a significant contribution (i.e., impact equal to or greater than the SIL) at any of the Proposed Facility's 116 significant receptor locations. The maximum 1-hour NO₂ impact for each of these facilities at the Proposed Facility's significant receptor locations was determined. Those facility sources (e.g., sources at Indiantown Cogeneration and Wheelabrator North Broward) that were found to have an insignificant impact (i.e., an impact below the 1-hour NO₂ SIL using the 7.55 µg/m³ threshold) at the Proposed Facility's receptor locations were removed from the inventory. Facilities with maximum 1-hour NO₂ impacts equal to or exceeding the SIL at these specific receptor locations were included in the final source inventory.

The initial inventory of nearby NO₂ sources provided by FDEP, prior to the screening analysis, is provided in Attachment A-1. The 20D inventory screening analysis is provided in Attachment A-2. Table 5-1 lists the facilities that were included in the full impact analysis, and are shown in Figure 5-3. Note that onsite emergency generating units were removed from the inventory based on the discussion presented in the revised supplemental air quality modeling protocol (Malcolm Pirnie, 2010c) and above in Section 3.1.

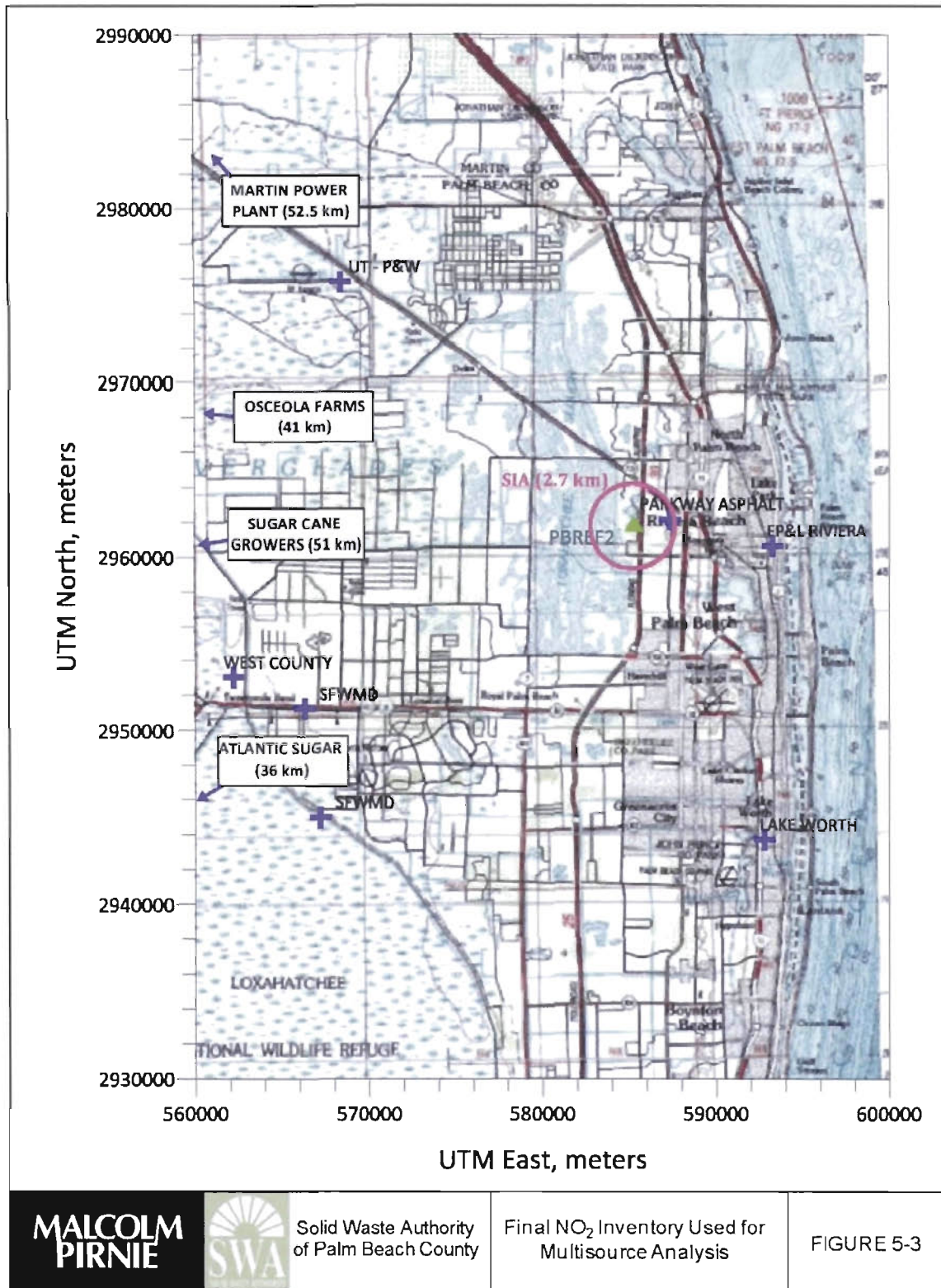
**Table 5-1:
Facilities Included in the Full Impact Analysis**

Facility Owner/Company Name	Site Name
Solid Waste Authority of Palm Beach County	North County Resource Recovery Facility (NCRRF)
Parkway Asphalt, Inc.	Parkway Asphalt (Riviera Beach)
Florida Power & Light (PRV)	Riviera Power Plant
City of Lake Worth Utilities	Tom G. Smith Power Plant
United Technologies Corporation	Pratt Whitney ACFT
Florida Power and Light Company	West County Energy Center
Atlantic Holding, LLC	Atlantic Sugar Mill
Osceola Farms	Osceola Farms
Sugar Cane Growers Co-op	Sugar Cane Growers Co-op
Florida Power & Light (PMR)	Martin Power Plant
South Florida Water Management District	Pump Station S-319
South Florida Water Management District	Pump Station S-362

The individual sources for the facilities listed in Table 5-1 that were included in the final full impact analysis are presented in Attachment A-3.

The source parameter and emissions information for the sources at each facility included in the full impact analysis was reviewed for completeness and accuracy. Since most existing NO₂ inventories were developed for compliance with the annual NAAQS, the FDEP inventory was reviewed and updated for the shorter averaging time (where needed) based on available information such as air permit documentation and vendor specifications. Allowable emissions were used whenever available. In addition, where readily available, building dimension data for the inventory sources were included in order to evaluate the potential effects of building downwash.

Figure 5-3: Final NO₂ Inventory Used for Multisource Analysis



5.3. Analysis and Results

Following USEPA guidance, the cumulative 1-hour NO₂ impact (8th highest daily 1-hour maximum concentration) should be added to a representative background concentration for comparison to the 1-hour NO₂ NAAQS. The representative 1-hour NO₂ background concentration was 108 µg/m³, which is the highest first-highest monitored value over the past 3 years of data (2007-2009) in Palm Beach County. Table 5-2 presents the 1-hour NO₂ monitored values from the Belvedere Road (2007-2008) and Lantana (2008-2009) monitoring stations.

**Table 5-2:
1-hour NO₂ Background Air Quality**

Pollutant	Averaging Period	Monitoring Location	Monitored Concentration ppb (µg/m ³)		
			2007	2008	2009
NO ₂	1-hour	Belvedere Road/Lantana	57 (108)	46 (87)	45 (85)

Source: Monitor ID Belvedere Road 120991004 / Lantana 120990020

The preliminary results of the multisource analysis for NO₂, which included the Proposed Facility and the final source inventory, indicated potential exceedances of the 1-hour NO₂ NAAQS. The next step was to determine if the Proposed Facility was significantly contributing to any of these modeled NAAQS exceedances (i.e., if the Proposed Facility's maximum modeled 1-hour NO₂ impact was equal to or exceeded the SIL). This step involved determining when the 1-hour NO₂ standard was exceeded and analyzing the modeled source impacts to determine whether the Proposed Facility's impact equaled or exceeded the 1-hour NO₂ SIL (using the 7.55 µg/m³ threshold) at the receptors and times when the NAAQS was exceeded.

The combined source inventory (final nearby source inventory and the Proposed Facility) and the Proposed Facility were modeled as two separate source groups. Using post-processing, those receptor locations and times when the 1-hour NO₂ NAAQS was potentially exceeded were compared to the locations and times when the impacts of the Proposed Facility were significant. Using this methodology, it was demonstrated that the impacts from the Proposed Facility were below the SIL at all receptor locations and times identified as having a potential exceedance of the NAAQS. Hence, the analysis demonstrated that the impacts from the Proposed Facility will not cause or contribute to an exceedance of the 1-hour NO₂ NAAQS. The details of the methodology and analysis used to determine that the Proposed Facility will not cause or contribute to an exceedance of the 1-hour NO₂ standard is presented in Attachment B.

Table 5-3 presents the maximum predicted 1-hour NO₂ concentration from the full cumulative impact analysis during the hours when the Proposed Facility had modeled 1-

hour concentrations equal to or greater than the SIL. Note that in this table, the reported modeled concentration is the more conservative highest, first-highest 1-hour concentration.

**Table 5-3:
Comparison to the 1-hour NO₂ NAAQS**

Maximum 1-hour NO ₂ Impact When PBREF2 is Significant (µg/m ³)					Max 1-hour NO ₂ Impact (µg/m ³)	Background NO ₂ (µg/m ³)	Total NO ₂ Impact (µg/m ³)	1-hour NO ₂ NAAQS (µg/m ³)
2001	2002	2003	2004	2005				
25.62	32.40	24.26	23.74	25.89	32.4	108	140.4	189

Notes:

1. Reported combined source inventory maximum impacts where PBREF2 is greater than the proposed 1-hour NO₂ SIL (in time and space) using Tier 2.
2. Background NO₂ concentration reported is the maximum 1-hour value (H1H) from 2007-2009.

6. Conclusions

This supplemental analysis evaluated the impacts of the Proposed Facility in comparison to the newly promulgated 1-hour NO₂ and SO₂ NAAQS. This analysis, combined with the results presented in the final *Air Quality Modeling Report* (Malcolm Pirnie, 2010a), demonstrated that the Proposed Facility will not cause or contribute to an exceedance of any ambient air quality standard, and in addition, that the Proposed Facility will not have an adverse impact on the ambient air quality within the vicinity of the project.

7. References

- FDEP, 2010. *Request for Additional Information*. DEP File No. 0990234-017-AC (PSD-FL-413). Florida Department of Environmental Protection. Letter dated June 15, 2010.
- Malcolm Pirnie, 2009. *Air Quality Modeling Protocol*. Palm Beach Renewable Energy Facility No. 2. April 2009.
- Malcolm Pirnie, 2010a. *Air Quality Modeling Report (submitted as Appendix F of the PSD Permit Application)*. Palm Beach Renewable Energy Facility No. 2. April 2010.
- Malcolm Pirnie, 2010b. *Supplemental Air Quality Modeling Protocol for 1-hour NO₂ and SO₂ NAAQS*. Palm Beach Renewable Energy Facility No. 2. August 2010.
- Malcolm Pirnie, 2010c. *Supplemental Air Quality Modeling Protocol for 1-hour NO₂ and SO₂ NAAQS*. Palm Beach Renewable Energy Facility No. 2. Revised September 2010.
- NCDNRCD, 1985. *Screening Threshold Method for PSD Modeling*. North Carolina Department of Natural Resources and Community Development. Division of Environmental Management
- USEPA, 1990. *New Source Review Workshop Manual – Prevention of Significant Deterioration and Nonattainment Area Permitting – DRAFT*. Office of Air Quality Planning and Standards (OAQPS), Research Triangle Park, North Carolina. October 1990.
- USEPA, 2010a. *Guidance Concerning the Implementation of the 1-hour NO₂ NAAQS for the Prevention of Significant Deterioration Program*. OAQPS. Memorandum from Stephen D. Page to Regional Air Division Directors dated June 29, 2010.
- USEPA, 2010b. *Guideline on Air Quality Models*, Appendix W of 40 CFR Part 51, OAQPS, Research Triangle Park, North Carolina.
- USEPA, 2010c. *Guidance Concerning the Implementation of the 1-hour SO₂ NAAQS for the Prevention of Significant Deterioration Program*. OAQPS. Memorandum from Stephen D. Page to Regional Air Division Directors dated August 23, 2010.
- USEPA, 2010d. *Notice Regarding Modeling for New Hourly NO₂ NAAQS*. OAQPS, Air Quality Modeling Group (AQM). February 25, 2010.

A-1. INITIAL FDEP SOURCE INVENTORY

Table A-1 presents the inventory of NO₂ facilities out to 70 kilometers (km) (50 km past a preliminary and conservatively determined impact area of 20 km) provided by Florida Department of Environmental Protection (FDEP). This FDEP inventory was revised for the shorter averaging time where possible based on available information, such as air permit documentation and vendor equipment specifications.

A-2. 20D INVENTORY SCREENING ANALYSIS

Table A-2 presents the results of the initial inventory screening analysis using the 20D method.

A-3. FINAL 1-HOUR NO₂ SOURCE INVENTORY

Table A-3 presents the final inventory used in the multisource analysis. The facilities remaining after the 20D screening procedure were further screened by modeling the individual facility sources with AERMOD and five years of meteorological data to determine if these facility sources would have a significant contribution (i.e., impact equal to or greater than the SIL) at any of the Proposed Facility's significant receptor locations. Those facility sources with an insignificant impact (i.e., an impact below the 1-hour NO₂ SIL) at the Proposed Facility's significant impact receptor locations were removed from the inventory. Facilities with maximum 1-hour NO₂ impacts equal to or exceeding the SIL at these specific receptor locations were included in the final source inventory. Note that all facilities which were located within the Significant Impact Area (SIA) were included in the full impact analysis inventory.

TABLE A-1
INITIAL FDEP NO₂ INVENTORY

Facility ID	Owner / Company Name	Site Name	Facility Status	UTM Zone	UTM East (km)	UTM North (km)	Distance from Center (km)	Location Based On	Facility Type Code	Description	EU ID	EU Description	EU Status	Stack Height (ft)	Diam (ft)	Exit Temp (F)	ACFM	DFCFM	VEL(ft/s)	Pollutant	Potential lb/hr	Potential tpy	Allowable (lb/hr)	Allowable (tpy)	Comments	Actual (tpy)	Year	
110003	W R GRACE & CO	W R GRACE & CO	ACTIVE	17	585.69	2902.83	59.14	Facility	99	OTHER	1	A VERMICULITE EXFOLIATION PLANT W/CYCLONE & BAGHOUSE	ACTIVE		4.5	80					NOX	0.086	0.18			0.3335	2003	
110003	W R GRACE & CO	W R GRACE & CO	ACTIVE	17	585.69	2902.83	59.14	Facility	99	OTHER	2	1.0 T/HR PERLITE EXPANDING W/CYCLONE & TWIN STACK BAGHOUSE	ACTIVE			80					NOX					1.007	2003	
110005	PAVEX CORP DBA RANGER CONSTRUCTION SOUTH	PAVEX DEERFIELD PLANT	ACTIVE	17	584.25	2908.02	53.94	Facility	22	ASPHALT PLANT	2	DRUM MIX ASPHALT BATCH PLANT. MAX RATE IS 280T/HR	ACTIVE	2	1						NOX					4.66249	2009	
110038	OLDCASTLE RETAIL, INC.	BONSAL AMERICAN	ACTIVE	17	586.2	2904.6	58.09	Facility	23	CONCRETE PLANT	1	One Aggregate Drying Kiln w/baghouse.max proc. rate 100 TPH.	ACTIVE	22	1.5	77	2500			23	NOX					1.46	2009	
110045	HARDRIVES ASPHALT COMPANY	HARDRIVES / DEERFIELD PLANT	ACTIVE	17	583.84	2909.11	52.67	Facility	22	ASPHALT PLANT	1	150 T/HR ASPHALTIC CONCRETE BATCH PLANT W/ROTARY DRYER.	ACTIVE	33	4.1	232	71934	42715		90	NOX	5.4	10.8			4.73634	2009	
111019	HOLY CROSS HOSPITAL	HOLY CROSS HOSPITAL	ACTIVE	17	587.09	2896.52	65.36	Facility	37	HOSPITALS/HEALTH CARE	2	1300 LB/HR WASTE INCIN FUELED-NATURED GAS (NEW) MODEL 1300 A	ACTIVE	42	2	175	20369	5110		108	NOX	2	8.8			0	2009	
111019	HOLY CROSS HOSPITAL	HOLY CROSS HOSPITAL	ACTIVE	17	587.09	2896.52	65.36	Facility	37	HOSPITALS/HEALTH CARE	3	Two(2) York-Shipley (8.4 MMBTU/hr) Steam Boilers.	ACTIVE	30	1						NOX					2.05	2009	
112094	WASTE MANAGEMENT INC. OF FLORIDA	CENTRAL DISPOSAL	ACTIVE	17	583.2	2908	54.19	Facility	39	MUNICIPAL SOLID WASTE LANDFILL	10	Small Gas Fired Turbines (3) & Open Flare	ACTIVE	37	4	840		32000			NOX					62.8	2008	
112094	WASTE MANAGEMENT INC. OF FLORIDA	CENTRAL DISPOSAL	ACTIVE	17	583.2	2908	54.19	Facility	39	MUNICIPAL SOLID WASTE LANDFILL	11	LFGCS, Treatment system, 2 enclosed flares, 1 open flare	ACTIVE	37	4	825		25660			NOX					12	2008	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	1	807 TPD MSW Combustor & Auxiliary Burners- Unit 1	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4	106.5	466.4	440.6035	2009	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	1	807 TPD MSW Combustor & Auxiliary Burners- Unit 1	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4			440.6035	2009	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	2	807 TPD MSW Combustor & Auxiliary Burners- Unit 2	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4			458.0389	2009	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	2	807 TPD MSW Combustor & Auxiliary Burners- Unit 2	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4	106.5	466.4	458.0389	2009	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	3	807 TPD MSW Combustor & Auxiliary Burners- Unit 3	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4	106.5	466.4	445.3981	2009	
112120	WHEELABRATOR NORTH BROWARD, INC.	WHEELABRATOR NORTH BROWARD	ACTIVE	17	583.9	2907.6	54.2	Facility	3	MUNICIPAL INCINERATION OR RRF	3	807 TPD MSW Combustor & Auxiliary Burners- Unit 3	ACTIVE	195	7.5	300	169000	51281		63.8	NOX	106.5	466.4			445.3981	2009	
112346	ATLANTIC BURIAL CASKET CO. DBA ABCO	ATLANTIC BURIAL CASKET CO. DBA ABCO	ACTIVE	17	584.56	2897.78	64.21	Facility	43	HUMAN CREMATORY	1	ONE UNIT INDUSTRIAL EQUIPMENT MODEL#E 43-PPH	ACTIVE	20	1.5	800	2000	672	18	NOX	0.25	0.25					0.0405	1993
112346	ATLANTIC BURIAL CASKET CO. DBA ABCO	ATLANTIC BURIAL CASKET CO. DBA ABCO	ACTIVE	17	584.56	2897.78	64.21	Facility	43	HUMAN CREMATORY	2	100 LB/HR INDUSTRIAL EQUIPMENT CREMATION UNIT IE43-PP11	ACTIVE	20	1.5	800	2000	672	18	NOX	0.25	0.25	0.25	0.25				
112346	ATLANTIC BURIAL CASKET CO. DBA ABCO	ATLANTIC BURIAL CASKET CO. DBA ABCO	ACTIVE	17	584.56	2897.78	64.21	Facility	43	HUMAN CREMATORY	3	A 100 LB/HR MODEL #E 43-PP1, POWER PAK II CREMATORY	ACTIVE	26	1.7	1000					NOX							
112352	SERVICÉ CORPORATION INTERNATIONAL (SCI)	GOLD COAST CREMATORY	ACTIVE	17	584.68	2897.79	64.2	Facility	43	HUMAN CREMATORY	1	MODEL IE43-PP1-100 CREMATION INCINERATOR (NORTH UNIT)	ACTIVE	20	1.7	1032	2116	742	15	NOX	0.02	0.1	0.02	0.1			0.23	1993
112352	SERVICÉ CORPORATION INTERNATIONAL (SCI)	GOLD COAST CREMATORY	ACTIVE	17	584.68	2897.79	64.2	Facility	43	HUMAN CREMATORY	2	MODEL IE43-PP1-100 CREMATION INCINERATOR (CENTER UNIT)	ACTIVE	20	1.7	1032	2116	742	15	NOX	0.02	0.1	0.02	0.1				
112352	SERVICÉ CORPORATION INTERNATIONAL (SCI)	GOLD COAST CREMATORY	ACTIVE	17	584.68	2897.79	64.2	Facility	43	HUMAN CREMATORY	3	HUMAN CREMATORY, IE43-PP1, POWER-PAK II (SOUTH UNIT)	ACTIVE								NOX	0.34	1.49					
112183	STIMPSON COMPANY, INC.	STIMPSON COMPANY, INC.	ACTIVE	17	585.5	2899.5	62.36	Facility	31	ABRASIVE BLAST CLEANING	2	TWO CLEAVER BROOKS FUEL OIL BOILERS	ACTIVE	6	0.67						NOX							
112357	BROWARD COUNTY WATER/WASTEWATER SERVICES	BROWARD COUNTY/NORTH REGIONAL WWTF	ACTIVE	17	583.49	2905.01	56.78	Facility	99	OTHER	2	8 Boilers fired with digester gas from anaerobic digesters	ACTIVE	31	1						NOX						1.71142	2009
112357	BROWARD COUNTY WATER/WASTEWATER SERVICES	BROWARD COUNTY/NORTH REGIONAL WWTF	ACTIVE	17	583.49	2905.01	56.78	Facility	99	OTHER	3	Six Emergency generators fired w/ diesel fuel	ACTIVE	22	1.3						NOX						7.392	2009
112357	BROWARD COUNTY WATER/WASTEWATER SERVICES	BROWARD COUNTY/NORTH REGIONAL WWTF	ACTIVE	17	583.49	2905.01	56.78	Facility	99	OTHER	4	Two flares (rated at 88,150 cf/hr) fired with digester gas	ACTIVE	12	0.67		1469			69.4	NOX					0.00555	2.03	2009
112369	WILEN PRESS LC	WILEN PRESS LC	ACTIVE	17	584.12	2908.83	53	Facility	36	GRAPHICS ARTS/PRINTING	1	Printing Press with TEC 2-pass dryer	ACTIVE	35	2.5		10423	3000		35.4	NOX						0.001445	2006
112369	WILEN PRESS LC	WILEN PRESS LC	ACTIVE	17	584.12	2908.83	53	Facility	36	GRAPHICS ARTS/PRINTING	2	G-14 Press with one drying Oven	ACTIVE	35	2.5	105	10423			35.4	NOX						0.001565	2006
112369	WILEN PRESS LC	WILEN PRESS LC	ACTIVE	17	584.12	2908.83	53	Facility	36	GRAPHICS ARTS/PRINTING	3	(3) Printing Presses with Ovens	ACTIVE	30	2	500		3000			NOX						0.001251	2009
112702	NEPTUNE MANAGEMENT CORP.	NEPTUNE SOCIETY POMPANO BEACH	ACTIVE	17	584.77	2906.97	54.99	Facility	43	HUMAN CREMATORY	1	THERM TEC HUMAN CREMATORY UNIT#1	ACTIVE	6	3	1800	3590			8.5	NOX					0.66		
112702	NEPTUNE MANAGEMENT CORP.	NEPTUNE SOCIETY POMPANO BEACH	ACTIVE	17	584.77	2906.97	54.99	Facility	43	HUMAN CREMATORY	2	THERM TEC HUMAN CREMATORY UNIT#2	ACTIVE	6	3	1800	3590			8.5	NOX					0.66		
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.08	2993.09	52.61	Emission Point	1	STEAM ELECTRIC PLANT	1	Fossil Fuel Fired Steam Generator #1(Acid Rain, Phase II)	ACTIVE	499	36	338	2634519			43.1	NOX	2595	11366.1	1808	7919	While burning natural gas	1762.516	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.08	2993.09	52.61	Emission Point	1	STEAM ELECTRIC PLANT	1	Fossil Fuel Fired Steam Generator #1(Acid Rain, Phase II)	ACTIVE	499	36	338	2634519			43.1	NOX	2595	11366.1	2595	11366	While burning fuel oil. Co-firing of NG and FO shall be prorated see permit condition A10.	1762.516	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.08	2993.09	52.56	Emission Point	1	STEAM ELECTRIC PLANT	2	Fossil Fuel Fired Steam Generator #2(Acid Rain, Phase II)	ACTIVE	499	36	338	2634519			43.1	NOX	2595	11366.1	1808	7919	While burning natural gas	1883.519	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.08	2993.09	52.56	Emission Point	1	STEAM ELECTRIC PLANT	2	Fossil Fuel Fired Steam Generator #2(Acid Rain, Phase II)	ACTIVE	499	36	338	2634519			43.1	NOX	2595	11366.1	2595	11366	While burning fuel oil. Co-firing of NG and FO shall be prorated see permit condition QA10.	1883.519	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.18	Emission Point	1	STEAM ELECTRIC PLANT	3	Combustion Turbine with HRSG (CT 3A)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	461	3108	While burning fuel oil. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	193.6	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.18	Emission Point	1	STEAM ELECTRIC PLANT	3	Combustion Turbine with HRSG (CT 3A)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	177	3108	While burning natural gas. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	193.6	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.2	Emission Point	1	STEAM ELECTRIC PLANT	4	Combustion Turbine with HRSG (CT 3B)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	177	3108	While burning natural gas. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	201.1	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.2	Emission Point	1	STEAM ELECTRIC PLANT	4	Combustion Turbine with HRSG (CT 3B)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	461	3108	While burning fuel oil. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	201.1	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.27	Emission Point	1	STEAM ELECTRIC PLANT	5	Combustion Turbine with HRSG (CT 4A)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	177	3108	While burning natural gas. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	172.8	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.27	Emission Point	1	STEAM ELECTRIC PLANT	5	Combustion Turbine with HRSG (CT 4A)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	461	3108	While burning fuel oil. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	172.8	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.29	Emission Point	1	STEAM ELECTRIC PLANT	6	Combustion Turbine with HRSG (CT 4B)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	461	3108	While burning fuel oil. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	203.8	2009
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.27	2992.61	52.29	Emission Point	1	STEAM ELECTRIC PLANT	6	Combustion Turbine with HRSG (CT 4B)(Acid Rain, Phase II)	ACTIVE	213	20	280	2420307			128.4	NOX	461	3108	177	3108	While burning natural gas. TYP represent the total allowed for fuel oil and natural gas. Basis for allowable: PSD-FL-146	20	

TABLE A-1
INITIAL FDEP NO₂ INVENTORY

Facility ID	Owner / Company Name	Site Name	Facility Status	UTM Zone	UTM East (km)	UTM North (km)	Distance from Center (km)	Location Based On	Facility Type Code	Description	EU ID	EU Description	EU Status	Stack Height (ft)	Diam (ft)	Exit Temp (F)	ACFM	OSCFM	VEL(ft/s)	Pollutant	Potential lb/hr	Potential (tpy)	Allowable (lb/hr)	Allowable (tpy)	Comments	Actual (tpy)	Year	
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.06	2997.68	52.24	Emission Point	1	STEAM ELECTRIC PLANT	18	Unit 8D - 170 MW gas turbine with gas-fired HRSG	ACTIVE	120	19	202	1004200	800000	59	NOX	23.6	103	334	83.5	Not Active - Replaced. Oil Firing. Annual emissions based on compressor inlet temperature of 59deg F and 500 hr/yr of oil firing	49.70005	2009	
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.06	2997.68	52.24	Emission Point	1	STEAM ELECTRIC PLANT	18	Unit 8D - 170 MW gas turbine with gas-fired HRSG	ACTIVE	120	19	202	1004200	800000	59	NOX	23.6	103	105	3.15	Not Active - Replaced. Gas Firing (W/Peaking). Annual emissions based on compressor inlet temperature of 59deg F and 60 hr/yr of peaking	49.70005	2009	
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.06	2997.68	52.24	Emission Point	1	STEAM ELECTRIC PLANT	18	Unit 8D - 170 MW gas turbine with gas-fired HRSG	ACTIVE	120	19	202	1004200	800000	59	NOX	23.6	103	82	16.4	Not Active - Replaced. Gas Firing (W/Power Augmentation). Annual emissions based on compressor inlet temperature of 59deg F and 400 hr/yr of PA	49.70005	2009	
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	ACTIVE	17	543.06	2997.68	52.24	Emission Point	1	STEAM ELECTRIC PLANT	18	Unit 8D - 170 MW gas turbine with gas-fired HRSG	ACTIVE	120	19	202	1004200	800000	59	NOX	23.6	103	66	111.87	Not Active - Replaced. Gas Firing (Normal). Annual emissions based on compressor inlet temperature of 59deg F and 3390 hr/yr	49.70005	2009	
850002	LOUIS DREYFUS CITRUS, INC.	LOUIS DREYFUS CITRUS / INDIANTOWN PLANT	ACTIVE	17	547.98	2991.47	47.48	Facility	11	CITRUS PROCESSING PLANT	5	30 T/HR CITRUS PEEL DRYER #2	ACTIVE	108	5						NOX	10.8	16.2			8.34	2009	
850002	LOUIS DREYFUS CITRUS, INC.	LOUIS DREYFUS CITRUS / INDIANTOWN PLANT	ACTIVE	17	547.98	2991.47	47.48	Facility	11	CITRUS PROCESSING PLANT	13	Citrus Peel Dryer (#1A) / Waste Heat Evaporator	ACTIVE	90	4	180	30000				39.8	NOX					8.905	2009
850015	SERVICE CORPORATION INTERNATIONAL (SCI)	TRI COUNTY CREMATORY-AYCOCK FUNERAL HOME	ACTIVE	17	573.5	3008.4	48.45	Facility	43	HUMAN CREMATORY	2	IND. EQUIP. & ENGR. MODEL IE43-PPII CREMATOR	ACTIVE	24	1.7	1099	2538	759		18	NOX	0.15	0.657				0.197	1994
850017	TURBO COMBUSTOR TECHNOLOGY	TURBO COMBUSTOR TECHNOLOGY	ACTIVE	17	577.38	3004.62	43.77	Facility	99	OTHER	4	Miscellaneous Operation	ACTIVE								NOX					0	1999	
850102	INDIANTOWN COGENERATION, L.P.	INDIANTOWN COGENERATION PLANT	ACTIVE	17	547.65	2990.7	47.25	Facility	1	STEAM ELECTRIC PLANT	1	Pulverized Coal Main Boiler	ACTIVE	495	16	140	1123700		93.2	NOX	582	2549	582	2549	Basis for allowable emission: PSD-FL-168. Emission limit based on 24 hr daily block average (midnight to midnight).	1294.431	2009	
850102	INDIANTOWN COGENERATION, L.P.	INDIANTOWN COGENERATION PLANT	ACTIVE	17	547.65	2990.7	47.25	Point	1	STEAM ELECTRIC PLANT	7	Aux Boilers (2)	ACTIVE	210	5	551	146600	62800	124.4	NOX					35	0850102-008-AC, Specific Condition 13.	6.51	2009
850102	INDIANTOWN COGENERATION, L.P.	INDIANTOWN COGENERATION PLANT	ACTIVE	17	547.65	2990.7	47.25	Facility	1	STEAM ELECTRIC PLANT	8	Temporary Package Boiler	ACTIVE								NOX							
850108	BRP US INC.	RALPH EVINRUDE TEST CENTER	ACTIVE	17	572.48	3009.37	49.49	Facility	99	OTHER	1	Two fixed engine test cells	ACTIVE	40	2	100	6000	5300	31.8	NOX								
850120	MARTIN CO. UTILITIES AND SOLID WASTE DEPT	MARTIN CO/PALM CITY II SANITARY LANDFILL	ACTIVE	17	561.11	3006.63	51	Emission Point	39	MUNICIPAL SOLID WASTE LANDFILL	2	New 2,000 scfm non-assisted open flare	ACTIVE	33	0.8	1400	482	29233		16	NOX	4.08	17.87				3.87	2009
850137	MARTIN FUNERAL HOME & CREMATORY	MARTIN CREMATORY FC280	ACTIVE	17	573.33	3007.47	47.42	Emission Point	43	HUMAN CREMATORY	1	Human Crematory-primary & secondary chambers, LPG fired	ACTIVE	18	1.6	993	4928	1707		40.8	NOX							
850141	GULFSTREAM NATURAL GAS SYSTEM, L.L.C.	MARTIN NATURAL GAS METER STATION 701	ACTIVE	17	543.83	2993.14	51.8	Emission Point	99	OTHER	1	Unit 1 - 10 MMBtu/hour gas-fired natural gas fuel heater	ACTIVE	15	2.2	750	1500			6.6	NOX	1.075	4.71					
850141	GULFSTREAM NATURAL GAS SYSTEM, L.L.C.	MARTIN NATURAL GAS METER STATION 701	ACTIVE	17	543.83	2993.14	51.8	Emission Point	99	OTHER	2	Unit 2 - 10 MMBtu/hour gas-fired natural gas fuel heater	ACTIVE	15	2.2	750	1500			6.6	NOX	1.075	4.71					
850147	FLORIDIAN NATURAL GAS STORAGE CO., INC.	FLORIDIAN NATURAL GAS STORAGE CO., INC.	CONSTRUCTION	17	545.93	2996.33	52.22	Facility	99	OTHER	2	TWO LET DOWN HEATERS	CONSTRUCTION	30	2	500	24750		131.3	NOX	9.96	12	4.98	5.97	ALLOW EMISSION ARE PER UNIT			
850147	FLORIDIAN NATURAL GAS STORAGE CO., INC.	FLORIDIAN NATURAL GAS STORAGE CO., INC.	CONSTRUCTION	17	545.93	2996.33	52.22	Facility	99	OTHER	3	EMERGENCY FIREWATER PUMP	CONSTRUCTION	45	2	800	13920			73.8	NOX							
850147	FLORIDIAN NATURAL GAS STORAGE CO., INC.	FLORIDIAN NATURAL GAS STORAGE CO., INC.	CONSTRUCTION	17	545.93	2996.33	52.22	Facility	99	OTHER	4	Four EMERGENCY GENERATORS (TWO 3,500 KW AND TWO 3,000 KW)	CONSTRUCTION				800	31500			NOX	52.3	6.53					
850147	FLORIDIAN NATURAL GAS STORAGE CO., INC.	FLORIDIAN NATURAL GAS STORAGE CO., INC.	CONSTRUCTION	17	545.93	2996.33	52.22	Facility	99	OTHER	6	EIGHT WATER ETHYLENE GLYCOL HEATERS	CONSTRUCTION	50	4	300	30125			40	NOX	4.49	5.39					
850147	FLORIDIAN NATURAL GAS STORAGE CO., INC.	FLORIDIAN NATURAL GAS STORAGE CO., INC.	CONSTRUCTION	17	545.93	2996.33	52.22	Facility	99	OTHER	8	AMINE SYSTEM VENT	CONSTRUCTION								NOX							
990005	OKEELANTA CORP	OKEELANTA SUGAR REFINERY	ACTIVE	17	524.9	2940.1	64.6	Emission Point	12	SUGAR PROCESSING PLANT	14	Boiler 16 - 150,000 lb/hr steam rate (gas/oil)	ACTIVE	75	5	393	18600	36860		15.8	NOX	24.2	84.438	42.2	184.8	While firing Natural Gas. Test within 12months before permit expiration.	0.046	2004
990005	OKEELANTA CORP	OKEELANTA SUGAR REFINERY	ACTIVE	17	524.9	2940.1	64.6	Emission Point	12	SUGAR PROCESSING PLANT	14	Boiler 16 - 150,000 lb/hr steam rate (gas/oil)	ACTIVE	75	5	393	18600	36860		15.8	NOX	24.2	84.438	40.4	176.9	While firing Fuel Oil. Test within 12months before permit expiration.	0.046	2004
990015	BOCA RESORTS, INC	BOCA RATON RESORT AND CLUB	ACTIVE	17	592.03	2913.73	48.66	Facility	28	DRY CLEANER	1	Six (6) 1 MBTUH boilers	ACTIVE	80	8	500	20000			6.6	NOX		2.5			0.035	2001	
990015	BOCA RESORTS, INC	BOCA RATON RESORT AND CLUB	ACTIVE	17	592.03	2913.73	48.66	Facility	28	DRY CLEANER	6	7 diesel and 1 natural gas generators, 2 diesel fire pumps	ACTIVE			80					NOX		9.88			0.2305	2007	
990015	BOCA RESORTS, INC	BOCA RATON RESORT AND CLUB	ACTIVE	17	592.03	2913.73	48.66	Facility	28	DRY CLEANER	7	TWO 10.46 MBTUH STEAM GENERATING UNITS	ACTIVE								NOX					0.03068	2009	
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.98	2945.42	36.18	Facility	12	SUGAR PROCESSING PLANT	1	Boiler 1 - 150,000 lb/hr steam rate	ACTIVE	90	6.2	160	100000			55.2	NOX	126	275	126	275	Lower limit accepted to reduce title V fees.	6.49	2005
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.98	2945.42	36.18	Facility	12	SUGAR PROCESSING PLANT	1	Boiler 1 - 150,000 lb/hr steam rate	ACTIVE	90	6.2	160	100000			55.2	NOX	126	275			6.49	2005	
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.98	2945.42	36.18	Facility	12	SUGAR PROCESSING PLANT	2	Boiler 2 - 150,000 lb/hr steam rate	ACTIVE	90	6.2	160	74510			41	NOX	126	275	126	275	Limit accepted to reduce title V fees	6.94	2005
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.98	2945.42	36.18	Facility	12	SUGAR PROCESSING PLANT	3	Boiler 3 - 130,000 lb/hr steam rate	ACTIVE	60	6	150	90329			53	NOX	112	245	112	245	Limit accepted to reduce title V fees.	4.38	2005
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.98	2945.42	36.18	Facility	12	SUGAR PROCESSING PLANT	4	Boiler 4 - 125,000 lb/hr steam rate	ACTIVE	90	6	150	90329			53	NOX	111.6	244	111.6	244	Limit accepted to reduce title V fees.	5.716	2005
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ACTIVE	17	552.9	2945.2	35.83	Emission Point	12	SUGAR PROCESSING PLANT	5	Boiler 5 - 115,000 lb/hr steam rate	ACTIVE	90	5.5	150	90000	58500		63.1	NOX	44.6	71.6	40.8	69.4	Bagasse only	5.39	2005
990019	OSCEOLA FARMS	OSCEOLA FARMS	ACTIVE	17	544.71	2967.55	40.95	Facility	12	SUGAR PROCESSING PLANT	2	BOILER #2 WITH 2 SCRUBBERS AND 2 STACKS	ACTIVE	90	5	156	121387			103	NOX	126	242	126	242	Limit accepted to reduce Title V fees.	93.0529	2009
990019	OSCEOLA FARMS	OSCEOLA FARMS	ACTIVE	17	544.02	2968	41.28	Emission Point	12	SUGAR PROCESSING PLANT	3	BOILER #3 WITH SCRUBBER	ACTIVE	90	6.3	155	146000	92000		78	NOX	64.6	96	64.6	96		39.75802	2009
990019	OSCEOLA FARMS	OSCEOLA FARMS	ACTIVE	17	544.71	2967.55	40.95	Facility	12	SUGAR PROCESSING PLANT	4	BAGASSE BOILER #4 (UNIT #5), 140,000 LBS/HR STEAM	ACTIVE	84	6	154	70992			41	NOX	126	242	126	242	Limit accepted to reduce Title V fees.	95.63755	2009
990019	OSCEOLA FARMS	OSCEOLA FARMS	ACTIVE	17	544.71	2967.55	40.95	Facility	12	SUGAR PROCESSING PLANT	5	165,000 LB/HR BAGASSE BOILER # 5 WITH 2 SCRUBBERS & 2 STACKS	ACTIVE	90	5	154	121736			103	NOX	148.5	285	148.5	285	Limit accepted to reduce Title V fees	82.86043	2009
990019	OSCEOLA FARMS	OSCEOLA FARMS	ACTIVE	17	544.02	2968	41.28	Emission Point	12	SUGAR PROCESSING PLANT	6	BOILER #6 WITH SCRUBBER PSD	ACTIVE	90	6.3	155	105000	65000		56	NOX	78.6	122	78.6	122		52.34	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	16	Boiler (BO-12-E6) w/heat input of 42 mmbTUH in Test Area E	ACTIVE	15	2.5	500	6690			22	NOX	6	26.28				1.3731	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	22	2 boilers (BO-1-MBH,BO-2-BMH); 54 MMBTU/HR each, at BH	ACTIVE	66	7.6	750	91000			33	NOX	14.538	63.678				0.32375	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	40	Two furnaces (FU-3-MHT, FU-4-MHT), 6 MMBTUH each	ACTIVE	44	3	2000	100				NOX	1.154	5.054				0.09	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	45	Water evaporator (EV-1-MW) w/heat input of 0.2 MMBTUH	ACTIVE			78					NOX	0.019	0.084				0.0076	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	59	Miscellaneous air and fuel heaters fired with natural gas	ACTIVE								NOX	7.25	31.755				0.1305	2009
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	ACTIVE	17	568.41	2975.84	21.61	Facility	99	OTHER	65	Miscellaneous diesel engines driving generators, pumps,																

TABLE A-1
INITIAL FDEP NO₂ INVENTORY

Facility ID	Owner / Company Name	Site Name	Facility Status	UTM Zone	UTM East (km)	UTM North (km)	Distance from Center (km)	Location Based On	Facility Type Code	Description	EU ID	EU Description	EU Status	Stack Height (ft)	Diam (ft)	Exit Temp (F)	ACFM	DSCFM	VEL(ft/s)	Pollutant	Potential (lb/hr)	Potential (tpy)	Allowable (lb/hr)	Allowable (tpy)	Comments	Actual (tpy)	Year	
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	ACTIVE	17	593.27	2960.62	8.95	Facility	1	STEAM ELECTRIC PLANT	4	Fossil Fuel Steam Generator, Unit 4 -Phase II Acid Rain Unit	ACTIVE	298	16	263	1052646		87.3	NOX	1891	8282.58	1630	7139.4	While firing natural gas.	50.202	2009	
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	ACTIVE	17	593.27	2960.62	8.95	Facility	1	STEAM ELECTRIC PLANT	4	Fossil Fuel Steam Generator, Unit 4 -Phase II Acid Rain Unit	ACTIVE	298	16	263	1052646		87.3	NOX	1891	8282.58	1891	8282.58	While firing fuel oil.	50.202	2009	
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	ACTIVE	17	593.27	2960.62	8.95	Facility	1	STEAM ELECTRIC PLANT	6	Emergency diesel generator, and mobile equip. & engines	ACTIVE								NOX					0.156	2009	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	1	2000 KW DIESEL GENERATOR # 1 PEAKING UNIT	ACTIVE	17	1.83	667	19208		121.7	NOX	99.8	436.91	99.8	436.91		1.25028	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	2	2000 KW DIESEL GENERATOR # 2 PEAKING UNIT	ACTIVE	17	1.83	667	19208		121.7	NOX	99.8	436.91	99.8	436.91		1.11438	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	3	2000 KW DIESEL GENERATOR # 3 PEAKING UNIT	ACTIVE	17	1.83	667	19208		121.7	NOX	99.8	436.91	99.8	436.91		1.29558	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	4	2000 KW DIESEL GENERATOR # 4 PEAKING UNIT	ACTIVE	17	1.83	667	19208		121.7	NOX	99.8	436.91	99.8	436.91		0.9362	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	5	2000 KW DIESEL GENERATOR # 5 PEAKING UNIT	ACTIVE	17	1.83	667	19208		121.7	NOX	99.8	436.91	99.8	436.91		0.9815	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	6	GAS TURBINE # 1	ACTIVE	46	16	837	983593		81.5	NOX	392	1715	392	1715		2.26388	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	9	FOSSIL FUEL STEAM GENERATOR #3 (Phase II, Acid Rain Unit)	ACTIVE	113	7	293	118719		51.4	NOX	163	712	163	712	Same limit for gas and fuel oil.	3.03478	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	11	COMBINED CYCLE UNIT (GT-2/S-5)	ACTIVE	75	10	404	412466		87.5	NOX	286	1252	286	1252	While firing fuel oil.	29.8866	2008	
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	ACTIVE	17	592.8	2943.7	19.82	Emission Point	1	STEAM ELECTRIC PLANT	11	COMBINED CYCLE UNIT (GT-2/S-5)	ACTIVE	75	10	404	412466		87.5	NOX	286	1252	159	696	While firing natural gas.	29.8866	2008	
990046	CEMEX CONSTRUCTION MATERIALS FLORIDA, LLC	CEMEX CONSTRUCTION / (RIVIERA BEACH)	ACTIVE	17	594.3	2960.8	8.82	Facility	33	BULK SHIPPING/RECEIVING	7	ship unloader with dust collector [and 3 diesel engines]	ACTIVE	20	2	100	5650		30	NOX	33.45	98.68				84.9468	2008	
990087	RANGER CONSTRUCTION INDUSTRIES, INC.	RANGER CONSTRUCTION / (ROYAL PALM BEACH)	ACTIVE	17	579.9	2951.7	10.92	Emission Point	22	ASPHALT PLANT	4	Double drum dryer (250 TPH)	ACTIVE	36	3.3	250	69463	32265	135	NOX	18.75	24.38				7.15239	2008	
990087	RANGER CONSTRUCTION INDUSTRIES, INC.	RANGER CONSTRUCTION / (ROYAL PALM BEACH)	ACTIVE	17	579.9	2951.7	10.92	Emission Point	22	ASPHALT PLANT	5	Asphalt cement heater (1.4 mmBTUH) burning distillate oil	ACTIVE	15	1	600	640	512	13.6	NOX						0.452	2006	
990095	BETHESDA MEMORIAL HOSPITAL	BETHESDA MEMORIAL HOSPITAL	ACTIVE	17	592.56	2931.94	30.78	Facility	37	HOSPITALS/HEALTH CARE	4	MEDICAL WASTE INCINERATION SYSTEM- w/HRSG	ACTIVE	65	1.5	133	3800	3420	35.8	NOX	12.6	27.8				2.34309	2009	
990095	BETHESDA MEMORIAL HOSPITAL	BETHESDA MEMORIAL HOSPITAL	ACTIVE	17	592.56	2931.94	30.78	Facility	37	HOSPITALS/HEALTH CARE	5	NATURAL GAS FIRED BOILERS	ACTIVE			800					NOX					6.4	2009	
990114	TRI COUNTY HUMANE SOCIETY	TRI COUNTY HUMANE SOCIETY ANIMAL SHELTER	ACTIVE	17	582.5	2915.7	46.3	Facility	42	ANIMAL CREMATORY	2	Animal Cremation Incinerator Model C-1000H	ACTIVE								NOX							
990119	BOCA RATON COMMUNITY HOSPITAL	BOCA RATON COMMUNITY HOSPITAL	ACTIVE	17	589.51	2915.67	46.44	Facility	37	HOSPITALS/HEALTH CARE	2	BIOLOGICAL INCINERATOR; SIMONDS #AF-3C (730 LB/HR)	ACTIVE	40	1.5		4306		40.6	NOX	1.1	4.783	5.6	12.3		1.1424	2009	
990123	FLORIDA POWER & LIGHT (PDC/OSF)	FP&L / PHYSICAL DISTRIBUTION CTR & OSF	ACTIVE	17	589.7	2961.2	4.52	Facility	32	PETROLEUM STORAGE/TRANSFER	1	12.5 mmBTU/hr boiler #1 (Unit A) [W] burning No.6 fuel oil	ACTIVE	30	1.7	425	4495		33	NOX						8.05	2009	
990123	FLORIDA POWER & LIGHT (PDC/OSF)	FP&L / PHYSICAL DISTRIBUTION CTR & OSF	ACTIVE	17	589.7	2961.2	4.52	Facility	32	PETROLEUM STORAGE/TRANSFER	2	12.5 mmBTU/hr boiler #2 (Unit B) [E] burning No.6 fuel oil	ACTIVE	30	1.7	425	4495		33	NOX						0.36091	2009	
990185	SIKORSKY AIRCRAFT CORPORATION	SIKORSKY AIRCRAFT CORP. / (JUPITER)	ACTIVE	17	567.5	2975	23	Facility	99	OTHER	9	Small boiler (BD-4-SIK); fired by natural gas, 2.93 mmBTU/hr	ACTIVE								NOX	0.285	1.25			0.04263	2004	
990185	SIKORSKY AIRCRAFT CORPORATION	SIKORSKY AIRCRAFT CORP. / (JUPITER)	ACTIVE	17	567.5	2975	23	Facility	99	OTHER	10	Paint spray booth (PS-13-SIK) with drying oven	ACTIVE	39	6	85	33000		19.5	NOX	0.285	1.25				0.005	2003	
990188	PEGGY ADAMS ANIMAL RESCUE LEAGUE OF THE	PEGGY ADAMS ANIMAL RESCUE LEAGUE	ACTIVE	17	588.69	2956.16	6.54	Facility	42	ANIMAL CREMATORY	3	5-stack 250W/HR ANIMAL CREMATION INCIN; CRAWFORD #C-10005	ACTIVE	20	1.7	860	3979	1456	29.2	NOX	0.375	0.234						
990188	PEGGY ADAMS ANIMAL RESCUE LEAGUE OF THE	PEGGY ADAMS ANIMAL RESCUE LEAGUE	ACTIVE	17	588.69	2956.16	6.54	Facility	42	ANIMAL CREMATORY	4	N-stack ANIMAL CREMATION INCIN; CRAWFORD #C-500P; 75 LB/HR	ACTIVE	20	1.7	960	1537	524	11	NOX	0.113	0.07						
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	585.82	2960.47	1.77	Emission Point	3	MUNICIPAL INCINERATION OR RRF	1	Municipal Solid Waste Boiler #1	ACTIVE	250	6.7	450	173462		81	NOX	284.77	1247.29	284.77	1247.29	RN: 24 hr average can be detrmnd by CEMs and not by stack test. Compliance mtd ???Or prmt shall be changed.	629.462	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	585.82	2960.47	1.77	Emission Point	3	MUNICIPAL INCINERATION OR RRF	2	Municipal Solid Waste Boiler #2	ACTIVE	250	6.7	450	173462		81	NOX	284.77	1247.29	284.77	1247.29		656.138	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	585.8	2960.2	1.94	Emission Point	3	MUNICIPAL INCINERATION OR RRF	4	Class III Landfill with Flare	ACTIVE	23	0.5	1400	1800	1663	152.8	NOX						6.844	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	584.49	2961.26	0.31	Facility	3	MUNICIPAL INCINERATION OR RRF	8	Class I Landfill Flare (3500 scfm)	ACTIVE	44	1.2	999					NOX					14.49	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	584.49	2961.26	0.31	Facility	3	MUNICIPAL INCINERATION OR RRF	10	Sludge Dryer Train #1	ACTIVE								NOX	5.6	24.5			2.8671	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	584.49	2961.26	0.31	Facility	3	MUNICIPAL INCINERATION OR RRF	11	Sludge Dryer Train #2	ACTIVE								NOX	5.6				1.3032	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	584.49	2961.26	0.31	Facility	3	MUNICIPAL INCINERATION OR RRF	16	Emergency Generator	ACTIVE								NOX					0.129047	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	585.1	2961.74	0.67	Emission Point	3	MUNICIPAL INCINERATION OR RRF	17	Woody Waste Facility Diesel Engine	ACTIVE	14	0.67	898	6092	2007	288	NOX						18.8864	2009	
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCRRF	ACTIVE	17	584.49	2961.26	0.31	Facility	3	MUNICIPAL INCINERATION OR RRF	21	Emergency generator (engine) 220 bhp, EPA Tier III certified	CONSTRU CTION								NOX							
990300	PALM BEACH COUNTY	BELVEDERE ANIMAL CARE & CONTROL FACILITY	ACTIVE	17	582.77	2952.24	9.52	Facility	42	ANIMAL CREMATORY	1	ANIMAL CREMATORY	ACTIVE								NOX	0.04	0.1	0.04	0.1		0.091	1993
990304	DEPARTMENT OF VETERANS AFFAIRS	VETERANS AFFAIRS MEDICAL CENTER	ACTIVE	17	588.16	2962.93	3.1	Facility	37	HOSPITALS/HEALTH CARE	2	Fossil Fuel Fired Steam Generators	ACTIVE	30	3						NOX					3.61	2006	
990304	DEPARTMENT OF VETERANS AFFAIRS	VETERANS AFFAIRS MEDICAL CENTER	ACTIVE	17	588.16	2962.93	3.1	Facility	37	HOSPITALS/HEALTH CARE	3	Electric Power Generators (five)	ACTIVE	50	1	960	6390		135.6	NOX						1.17176	2006	
990305	NORTHWOOD FUNERAL HOME	NORTHWOOD CREMATORY	ACTIVE	17	593.94	2960.25	8.76	Facility	43	HUMAN CREMATORY	1	Human Crematory-2chmbrs,NG fired,w/opacity monitor,150W/hr	ACTIVE	16	1.7	800	1600	600	11	NOX	0.225	0.986						
990310	COMMUNITY ASPHALT CORP	COMMUNITY ASPHALT / WPB PLANT	ACTIVE	17	582.3	2950.9	2.98	Facility	22	ASPHALT PLANT	1	Rotary drum mixer (300 TPH) fired by fuel oil/natural gas	ACTIVE	42	4.6	285	53153	24981	53.3	NOX	9.625	19.25				5.89914	2009	
990310	COMMUNITY ASPHALT CORP	COMMUNITY ASPHALT / WPB PLANT	ACTIVE	17	582.3	2950.9	2.98	Facility	22	ASPHALT PLANT	2	1,412 mmBTU/hr Asphalt Cement Heater	ACTIVE								NOX	0.2955	0.591			0.341	2008	
990310	COMMUNITY ASPHALT CORP	COMMUNITY ASPHALT / WPB PLANT	ACTIVE	17	582.3	2950.9	2.98	Facility	22	ASPHALT PLANT	4	500 TPH Portable Rock Crusher, Diesel Engine, & Screening	ACTIVE								NOX	10.85	14.105			2.034	2009	
990316	SCOBEE-COMBS-BOWDEN FUNERAL HOME	SCOBEE-COMBS-BOWDEN FUNERAL HOME	ACTIVE	17	593.85	2936.06	27.16	Facility	43	HUMAN CREMATORY	1	HUMAN CREMATION INCINERATOR, IEE CO. #IE43-PPH (150 LB/HR)	ACTIVE	16	1.7	800	1605	606	11	NOX	0.2	0.2	0.2	0.2	INVALID Limit			
990318	ALL COUNTY FUNERAL HOME AND CREMATORY	ALL COUNTY FUNERAL HOME AND CREMATORY	ACTIVE	17	593.57	2944.22	19.43	Facility	43	HUMAN CREMATORY	1	HUMAN CREMATOR, IEE CO. #IE43-PPH (150 LB/HR) - NW Stack	ACTIVE								NOX							
990318	ALL COUNTY FUNERAL HOME AND CREMATORY	ALL COUNTY FUNERAL HOME AND CREMATORY	ACTIVE	17	593.57	2944.22	19.43	Facility	43	HUMAN CREMATORY	2	Human Cremation Incinerator IE43-PPH - SE Stack	ACTIVE															

TABLE A-1
INITIAL FDEP NO₂ INVENTORY

Facility ID	Owner / Company Name	Site Name	Facility Status	UTM Zone	UTM East (km)	UTM North (km)	Distance from Center (km)	Location Based On	Facility Type Code	Description	EU ID	EU Description	EU Status	Stack Height (ft)	Diam (ft)	Exit Temp (F)	ACFM	DSCFM	VEL(ft/s)	Pollutant	Potential (lb/hr)	Potential (tpy)	Allowable (lb/hr)	Allowable (tpy)	Comments	Actual (tpy)	Year		
990349	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION 5-5A	ACTIVE	17	562.6	2951.3	24.6	Emission Point	45	FLOOD CONTROL PUMP STATIONS	1	Six -1600 hp Pump engines and Two 535 hp generators	ACTIVE	18	1.33	775	15370		184.4	NOX	56.94	249.4			53.0125	2008			
990350	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION 5-6	ACTIVE	17	596.17	2927.82	35.89	Emission Point	45	FLOOD CONTROL PUMP STATIONS	1	Three - 1240 bhp diesel engines two 164 hp. generators	ACTIVE	59	2.3	436	5964		23.9	NOX	47.05	206.08	56.46	247.3	gallons per rolling 12-mo.	36.6529	2008		
990350	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION 5-6	ACTIVE	17	596.17	2927.82	35.89	Emission Point	45	FLOOD CONTROL PUMP STATIONS	1	Three - 1240 bhp diesel engines two 164 hp. generators	ACTIVE	59	2.3	436	5964		23.9	NOX	47.05	206.08	56.46	247.3	gallons per hour	36.6529	2008		
990354	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION 5-7	ACTIVE	17	545.77	2912.76	62.64	Facility	45	FLOOD CONTROL PUMP STATIONS	1	Three (3) Diesel Pump Engines 800 hp each	ACTIVE	53	1	600	6450	2838	136.9	NOX		235.02			51.8673	2008			
990354	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION 5-7	ACTIVE	17	545.77	2912.76	62.64	Facility	45	FLOOD CONTROL PUMP STATIONS	2	Two (2) Emergency Generators 380 hp	ACTIVE	46	0.5											0.512494	2008		
990530	HUBBARD CONSTRUCTION COMPANY	HUBBARD / EAST COAST PAVING (WPB)	ACTIVE	17	562.79	2951.97	24.45	Emission Point	22	ASPHALT PLANT	2	Hot Drum Mix - Asphalt Dryer (400 tph)	ACTIVE	30	3.8	250	68194	52000	100.2	NOX	22	13.75			4.07855	2009			
990530	HUBBARD CONSTRUCTION COMPANY	HUBBARD / EAST COAST PAVING (WPB)	ACTIVE	17	562.79	2951.97	24.45	Emission Point	22	ASPHALT PLANT	3	Asphalt Cement heater	ACTIVE	30	3.8	250	68194	52000	100.2	NOX			1.4		0.37699	2009			
990530	HUBBARD CONSTRUCTION COMPANY	HUBBARD / EAST COAST PAVING (WPB)	ACTIVE	17	562.79	2951.97	24.45	Emission Point	22	ASPHALT PLANT	4	Rap Crusher (450 TPH)	ACTIVE			70									1.16512	2009			
990549	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION G-310	ACTIVE	17	554.2	2940.45	36.09	Facility	45	FLOOD CONTROL PUMP STATIONS	1	Four engines (2-1535 hp; 2-751 hp) and two generators 900 hp	ACTIVE			250					NOX	56.84	248.98	56.84	248.98	gallons per rolling 12-month total.	32.2103	2008	
990549	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION G-310	ACTIVE	17	554.2	2940.45	36.09	Facility	45	FLOOD CONTROL PUMP STATIONS	1	Four engines (2-1535 hp; 2-751 hp) and two generators 900 hp	ACTIVE			250						NOX	56.84	248.98	56.84	248.98	gallons per rolling 12-month total.	32.2103	2008
990550	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION G-335	ACTIVE	17	552.6	2921.99	57.35	Facility	45	FLOOD CONTROL PUMP STATIONS	1	FOUR engines (2-1600 hp; 2-587 hp)-TWO generators (900 hp)	ACTIVE													60.684	2008		
990562	SOUTH FLORIDA SHAVINGS CO.	SOUTH FLORIDA SHAVINGS CO.	ACTIVE	17	578.79	2941.48	21.35	Facility	38	MISC WOOD PRODUCTS MFG.	1	Wood shavings dryer	ACTIVE	20	1.5	200	4000		37.7	NOX	0.5	2.19			1.75	2007			
990566	INDIAN TRAIL IMPROVEMENT DISTRICT	INDIAN TRAIL IMPROVEMENT DISTRICT - ACI	ACTIVE	17	565.73	2956.39	20.26	Facility	5	OTHER INCINERATION	1	Air curtain incinerator with compacted limestone pit	ACTIVE			1500										1.62	2007		
990614	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION G-370	ACTIVE	17	540.47	2919.49	61.25	Facility	45	FLOOD CONTROL PUMP STATIONS	1	Three - 1360 bhp and two-900 hp diesel emergency generators	ACTIVE	52	1.33	650	13066		156.7	NOX	132.72	248.53			28.8932	2009			
990620	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION S-319	ACTIVE	17	566.3	2951.22	21.05	Facility	45	FLOOD CONTROL PUMP STATIONS	1	Five diesel engines and two emergency generators	ACTIVE	58	1.5	650	11624		109.6	NOX	168.7	241.44			3.40188	2009			
990621	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMO / PUMP STATION S-362	ACTIVE	17	567.21	2944.98	24.08	Emission Point	45	FLOOD CONTROL PUMP STATIONS	1	Three - 1303 bhp and two - 839 hp diesel engines.	ACTIVE	60	1.33	650	8060		96.7	NOX	111.74	249.222			5.90374	2009			
990630	SOUTH FLORIDA MATERIALS CORP.	SOUTH FLORIDA MATERIALS CORP.	ACTIVE	17	593.18	2960.83	8.84	Emission Point	33	BULK SHIPPING/RECEIVING	1	Two heaters for asphalt	ACTIVE	24	1.67	513	3618	1865	27.5	NOX	1.39	6.09			1.212	2009			
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Emission Point	1	STEAM ELECTRIC PLANT	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Emission Point	1	STEAM ELECTRIC PLANT	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Emission Point	1	STEAM ELECTRIC PLANT	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on oil				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Emission Point	1	STEAM ELECTRIC PLANT	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Emission Point	1	STEAM ELECTRIC PLANT	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on oil.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	2	250 MW Combined Cycle Combustion Turbine System - Unit 1B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	3	250 MW Combined Cycle Combustion Turbine System - Unit 1C	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	3	250 MW Combined Cycle Combustion Turbine System - Unit 1C	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	3	250 MW Combined Cycle Combustion Turbine System - Unit 1C	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on oil.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	3	250 MW Combined Cycle Combustion Turbine System - Unit 1C	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	3	250 MW Combined Cycle Combustion Turbine System - Unit 1C	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	4	250 MW Combined Cycle Combustion Turbine System - Unit 2A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	4	250 MW Combined Cycle Combustion Turbine System - Unit 2A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	4	250 MW Combined Cycle Combustion Turbine System - Unit 2A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	4	250 MW Combined Cycle Combustion Turbine System - Unit 2A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on oil				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	4	250 MW Combined Cycle Combustion Turbine System - Unit 2A	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	5	250 MW Combined Cycle Combustion Turbine System - Unit 2B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	5	250 MW Combined Cycle Combustion Turbine System - Unit 2B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	5	250 MW Combined Cycle Combustion Turbine System - Unit 2B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2		24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	5	250 MW Combined Cycle Combustion Turbine System - Unit 2B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on gas.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	5	250 MW Combined Cycle Combustion Turbine System - Unit 2B	ACTIVE	149	22	188	1311589		57.5	NOX	30.2				Limit on oil.				
990646	FLORIDA POWER AND LIGHT COMPANY	FP&																											

TABLE A-1
INITIAL FDEP NO_x INVENTORY

Facility ID	Owner / Company Name	Site Name	Facility Status	UTM Zone	UTM East (km)	UTM North (km)	Distance from Center (km)	Location Based On	Facility Type Code	Description	EU ID	EU Description	EU Status	Stack Height (ft)	Diam (ft)	Exit Temp (F)	ACFM	DSCFM	VEL(ft/s)	Pollutant	Potential (lb/hr)	Potential (tpy)	Allowable (lb/hr)	Allowable (tpy)	Comments	Actual (tpy)	Year
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.19	2953.04	24.61	Facility	1	STEAM ELECTRIC PLANT	10	Two nominal 10 MW MMBTU/hr gas fired process heaters	CONSTRUCTION	30	1	500	4950		105	NOX	0.95	4.2			Initial test. Compliance with 40 CFR 60 Subpart Dc		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	13	250 MW CTG with supplementary fired HRSG - Unit 3A	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	13	250 MW CTG with supplementary fired HRSG - Unit 3A	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	13	250 MW CTG with supplementary fired HRSG - Unit 3A	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	13	250 MW CTG with supplementary fired HRSG - Unit 3A	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9			Limit on gas		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	13	250 MW CTG with supplementary fired HRSG - Unit 3A	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9			Limit on oil		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	14	250 MW CTG with supplementary fired HRSG - Unit 3B	CONSTRUCTION	149	22	195	1360000		59.6	NOX	76.85	108.9	24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	14	250 MW CTG with supplementary fired HRSG - Unit 3B	CONSTRUCTION	149	22	195	1360000		59.6	NOX	76.85	108.9	82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	14	250 MW CTG with supplementary fired HRSG - Unit 3B	CONSTRUCTION	149	22	195	1360000		59.6	NOX	76.85	108.9	20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	14	250 MW CTG with supplementary fired HRSG - Unit 3B	CONSTRUCTION	149	22	195	1360000		59.6	NOX	76.85	108.9			Limit on gas.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	14	250 MW CTG with supplementary fired HRSG - Unit 3B	CONSTRUCTION	149	22	195	1360000		59.6	NOX	76.85	108.9			Limit on oil.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	15	250 MW CTG with supplementary fired HRSG - Unit 3C	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	24.2		Limit on gas in CTG & DB operation mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	15	250 MW CTG with supplementary fired HRSG - Unit 3C	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9			Limit on oil.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	15	250 MW CTG with supplementary fired HRSG - Unit 3C	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	82.4		Limit on oil; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	15	250 MW CTG with supplementary fired HRSG - Unit 3C	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9			Limit on gas.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562.2	2952.6	24.74	Emission Point	1	STEAM ELECTRIC PLANT	15	250 MW CTG with supplementary fired HRSG - Unit 3C	CONSTRUCTION		22	195	1360000		59.6	NOX	78.5	108.9	20		Limit on gas in CTG normal mode; NOx mass emission rates are defined as oxides of nitrogen expressed as NO2.		
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	CONSTRUCTION	17	562	2952	25.23	Emission Point	1	STEAM ELECTRIC PLANT	18	Two nominal 2250 KW (~21 MMBtu/hr) emergency generators	CONSTRUCTION	30	1	916	17463		370.6	NOX	0.95	4.2					
990678	EDGLEY CREMATORY, INC.	EDGLEY CREMATORY, INC. / RIVIERA BEACH	ACTIVE	17	591.37	2953.58	10.19	Emission Point	43	HUMAN CREMATORY	1	IE Model IE-43-PP11 Unit 1 SN404339 - South Stack	ACTIVE	18	1.67	1099	2538	759	19.3	NOX	0.118	0.517					
1110071	FLORIDA POWER & LIGHT(PSL)	FPL / ST LUCIE NUCLEAR POWER PLANT	ACTIVE	17	573.86	3025.01	64.58	Facility	2	OTHER ELECTRIC PRODUCTION	1	4 MAIN PLANT EMERGENCY DIESEL GENERATORS, each with 2 engine	ACTIVE	12	1.67	790	15800		120.2	NOX						17.6957	2009
1110071	FLORIDA POWER & LIGHT(PSL)	FPL / ST LUCIE NUCLEAR POWER PLANT	ACTIVE	17	574.794	3024.868	64.29	Emission Point	2	OTHER ELECTRIC PRODUCTION	2	2 BUILDING EMERGENCY DIESEL GENERATORS	ACTIVE	15	0.9	1050	7000		183.4	NOX						0.106457	2009
1110071	FLORIDA POWER & LIGHT(PSL)	FPL / ST LUCIE NUCLEAR POWER PLANT	ACTIVE	17	573.86	3025.01	64.58	Facility	2	OTHER ELECTRIC PRODUCTION	3	MISCELLANEOUS DIESEL DRIVEN EQUIPMENT	ACTIVE								NOX					13.7204	2009
1110130	ALL HEAVENLY CREATURES PET CEMETERY	ALL HEAVENLY CREATURES	ACTIVE	17	567.4	3022.73	63.78	Facility	42	ANIMAL CREMATORY	1	MATTHEWS MODEL IE POWER PACK II	ACTIVE	15	1.5	1000	2000	650	18.9	NOX							

You entered the following criteria:
 Search By: point
 UTM: 17 2961.736km N 585.295km E
 Point represents center.
 Radius: 70 km
 Facility Status: A C
 EU Status: A C
 Pollutant: NOX
 Pollutant Status: A
 Report Output: Full

Run Date: 06/29/2010 03:01:35

**TABLE A-2
20D NO₂ SOURCE INVENTORY SCREENING**

AIRS Number	Fac. Code	Facility	County	UTM Coordinates		Relative to PBREF2			est. SIA = 2.7 km			
				East (km)	North (km)	X (km)	Y (km)	Distance (km)	Within SIA?	Max NOx (TPY)	Short-term 20D	> 20D ?
990344	FL52	PARKWAY ASPHALT / (RIVIERA BEACH)	Palm Beach	587.36	2962.14	-2.1	-0.4	2.10	Yes	19.1	42.1	No
990304	FL41	VETERANS AFFAIRS MEDICAL CENTER	Palm Beach	588.16	2962.93	-2.9	-1.2	3.10		48.6	62.1	No
990123	FL37	FP&L / PHYSICAL DISTRIBUTION CTR & OSF	Palm Beach	589.7	2961.2	-4.4	0.5	4.44		16.1	88.7	No
990188	FL39	PEGGY ADAMS ANIMAL RESCUE LEAGUE	Palm Beach	588.69	2956.16	-3.4	5.6	6.53		0.3	130.6	No
990630	FL65	SOUTH FLORIDA MATERIALS CORP.	Palm Beach	593.18	2960.83	-7.9	0.9	7.94		6.1	158.7	No
990042	FL30	FP&L / RIVIERA POWER PLANT	Palm Beach	594.249	2960.632	-9.0	1.1	9.02		16,565.3	180.4	Yes
990325	FL47	ROYAL PALM FUNERAL HOME	Palm Beach	593.38	2960.47	-8.1	1.3	8.18		0.7	163.7	No
990305	FL42	NORTHWOOD CREMATORY	Palm Beach	593.94	2960.25	-8.6	1.5	8.77		1.0	175.4	No
990333	FL50	COMPRESSOR STATION NO. 21	Palm Beach	584.34	2952.83	1.0	8.9	8.96		78.1	179.1	No
990046	FL32	CEMEX CONSTRUCTION / (RIVIERA BEACH)	Palm Beach	594.3	2960.8	-9.0	0.9	9.05		98.7	181.1	No
990300	FL40	BELVEDERE ANIMAL CARE & CONTROL FACILITY	Palm Beach	582.77	2952.24	2.5	9.5	9.83		0.1	196.5	No
990678	FL67	EDGLEY CRMATORY, INC. / (RIVIERA BEACH)	Palm Beach	591.37	2953.58	-6.1	8.2	10.17		0.5	203.4	No
990343	FL51	PALMS WEST CREMATORY / (RPB)	Palm Beach	579.39	2953.36	5.9	8.4	10.25		0.0	205.0	No
990310	FL43	COMMUNITY ASPHALT / WPB PLANT	Palm Beach	582.3	2950.9	3.0	10.8	11.24		34.0	224.8	No
990087	FL33	RANGER CONSTRUCTION / (ROYAL PALM BEACH)	Palm Beach	579.9	2951.7	5.4	10.0	11.39		24.8	227.9	No
990322	FL46	TREASURE COAST CREMATORY / (LAKE WORTH)	Palm Beach	593.83	2945.15	-8.5	16.6	18.65		2.0	373.1	No
990318	FL45	ALL COUNTY FUNERAL HOME AND CREMATORY	Palm Beach	593.57	2944.22	-8.3	17.5	19.37		0.0	387.4	No
990045	FL31	L.W. UTILITIES / TOM G. SMITH PWR PLANT	Palm Beach	592.8	2943.7	-7.5	18.0	19.54		5,863.6	390.7	Yes
990566	FL61	INDIAN TRAIL IMPROVEMENT DISTRICT - ACI	Palm Beach	565.73	2956.39	19.6	5.3	20.28		22.1	405.6	No
990562	FL60	SOUTH FLORIDA SHAVINGS CO.	Palm Beach	578.79	2941.48	6.5	20.3	21.27		2.2	425.5	No
990620	FL63	SFWMD / PUMP STATION S-319	Palm Beach	566.3	2951.22	19.0	10.5	21.71		738.9	434.2	Yes
990021	FL28	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	Palm Beach	568.41	2975.84	16.9	-14.1	22.00		1,256.4	440.0	Yes
990185	FL38	SIKORSKY AIRCRAFT CORP. / (JUPITER)	Palm Beach	567.5	2975	17.8	-13.3	22.19		2.5	443.9	No
990530	FL57	HUBBARD / EAST COAST PAVING (WPB)	Palm Beach	562.79	2951.97	22.5	9.8	24.53		29.4	490.7	No
990621	FL64	SFWMD / PUMP STATION S-362	Palm Beach	567.21	2944.98	18.1	16.8	24.65		489.4	493.1	No
990646	FL66	FP&L / WEST COUNTY ENERGY CENTER	Palm Beach	562.19	2953.04	23.1	8.7	24.69		997.0	493.7	Yes
990349	FL54	SFWMD / PUMP STATION S-5A	Palm Beach	562.6	2951.3	22.7	10.4	24.98		249.4	499.6	No
990316	FL44	SCOBEE-COMBS-BOWDEN FUNERAL HOME	Palm Beach	593.85	2936.06	-8.6	25.7	27.06		0.2	541.3	No
990095	FL34	BETHESDA MEMORIAL HOSPITAL	Palm Beach	592.56	2931.94	-7.3	29.8	30.67		34.2	613.4	No
990347	FL53	PBC SOUTHERN REGION WATER RECLAMATION	Palm Beach	581.85	2929.65	3.4	32.1	32.27		5.1	645.4	No
990350	FL55	SFWMD / PUMP STATION S-6	Palm Beach	596.17	2927.82	-10.9	33.9	35.62		247.3	712.3	No
990016	FL26	ATLANTIC SUGAR MILL	Palm Beach	552.98	2945.42	32.3	16.3	36.20		1,108.4	724.0	Yes
990549	FL58	SFWMD / PUMP STATION G-310	Palm Beach	554.2	2940.45	31.1	21.3	37.68		248.9	753.7	No
990328	FL48	HARDRIVES / DELRAY PLANT	Palm Beach	590.6	2923.5	-5.3	38.2	38.60		2.5	772.0	No
990019	FL27	OSCEOLA FARMS	Palm Beach	544.71	2967.55	40.6	-5.8	41.00		987.0	820.0	Yes
850017	FL17	TURBO COMBUSTOR TECHNOLOGY	Palm Beach	577.38	3004.62	7.9	-42.9	43.61		0.0	872.2	No
990114	FL35	TRI COUNTY HUMANE SOCIETY ANIMAL SHELTER	Palm Beach	582.5	2915.7	2.8	46.0	46.12		0.0	922.4	No
990119	FL36	BOCA RATON COMMUNITY HOSPITAL	Palm Beach	589.51	2915.67	-4.2	46.1	46.26		12.3	925.2	No
850137	FL21	MARTIN CREMATORY FC280	Palm Beach	573.33	3007.47	12.0	-45.7	47.27		0.0	945.5	No
850102	FL18	INDIANTOWN COGENERATION PLANT	Palm Beach	547.65	2990.7	37.6	-29.0	47.50		2,584.0	950.0	Yes
850002	FL15	LOUIS DREYFUS CITRUS / INDIANTOWN PLANT	Palm Beach	547.98	2991.47	37.3	-29.7	47.71		25.1	954.3	No
850015	FL16	TRI COUNTY CREMATORY-AYCOCK FUNERAL HOME	Palm Beach	573.5	3008.4	11.8	-46.7	48.13		0.7	962.6	No
990015	FL25	BOCA RATON RESORT AND CLUB	Palm Beach	592.03	2913.73	-6.7	48.0	48.48		12.4	969.5	No

**TABLE A-2
20D NO₂ SOURCE INVENTORY SCREENING**

AIRS Number	Fac. Code	Facility	County	UTM Coordinates		Relative to PBREF2			est. SIA = 2.7 km			
				East (km)	North (km)	X (km)	Y (km)	Distance (km)	Within SIA?	Max NO _x (TPY)	Short-term 20D	> 20D ?
850108	FL19	RALPH EVINRUDE TEST CENTER	Palm Beach	572.48	3009.37	12.8	-47.6	49.33		0.0	986.6	No
850120	FL20	MARTIN CO/PALM CITY II SANITARY LANDFILL	Palm Beach	561.11	3006.63	24.2	-44.9	50.99		17.9	1019.9	No
990026	FL29	SUGAR CANE GROWERS CO-OP	Palm Beach	534.87	2953.86	50.4	7.9	51.04		3,470.7	1020.7	Yes
990550	FL59	SFWMD / PUMP STATION G-335	Palm Beach	552.6	2921.99	32.7	39.7	51.47		60.7	1029.3	No
850141	FL22	MARTIN NATURAL GAS METER STATION 701	Palm Beach	543.83	2993.14	41.5	-31.4	52.01		9.4	1040.3	No
850147	FL23	FLORIDIAN NATURAL GAS STORAGE CO., INC.	Palm Beach	545.93	2996.33	39.4	-34.6	52.41		23.9	1048.1	No
850001	FL14	MARTIN POWER PLANT	Palm Beach	543.08	2992.61	42.2	-30.9	52.30		35,949.0	1046.0	Yes
110045	FL4	HARDRIVES / DEERFIELD PLANT	Palm Beach	583.84	2909.11	1.5	52.6	52.65		10.8	1052.9	No
112369	FL12	WILEN PRESS LC	Palm Beach	584.12	2908.83	1.2	52.9	52.92		0.0	1058.4	No
110005	FL2	PAVEX DEERFIELD PLANT	Palm Beach	584.25	2908.02	1.0	53.7	53.73		4.7	1074.5	No
112094	FL6	CENTRAL DISPOSAL	Palm Beach	583.2	2908	2.1	53.7	53.78		74.8	1075.5	No
112120	FL7	WHEELABRATOR NORTH BROWARD	Palm Beach	583.9	2907.6	1.4	54.1	54.15		1,399.2	1083.1	Yes
112702	FL13	NEPTUNE SOCIETY POMPANO BEACH	Palm Beach	584.77	2906.97	0.5	54.8	54.77		1.3	1095.4	No
112357	FL11	BROWARD COUNTY/NORTH REGIONAL WWTF	Palm Beach	583.49	2905.01	1.8	56.7	56.75		88.4	1135.1	No
110038	FL3	BONSAL AMERICAN	Palm Beach	586.2	2904.6	-0.9	57.1	57.14		22.1	1142.9	No
110003	FL1	W R GRACE & CO	Palm Beach	585.69	2902.83	-0.4	58.9	58.91		1.3	1178.1	No
990614	FL62	SFWMD / PUMP STATION G-370	Palm Beach	540.47	2919.49	44.8	42.2	61.60		581.3	1231.9	No
112183	FL10	STIMPSON COMPANY, INC.	Palm Beach	585.5	2899.5	-0.2	62.2	62.24		0.4	1244.7	No
990354	FL56	SFWMD / PUMP STATION S-7	Palm Beach	545.77	2912.76	39.5	49.0	62.94		235.5	1258.7	No
1110130	FL69	ALL HEAVENLY CREATURES	Palm Beach	567.4	3022.73	17.9	-61.0	63.56		0.0	1271.3	No
112152	FL9	GOLD COAST CREMATORY	Palm Beach	584.68	2897.79	0.6	63.9	63.95		10.2	1279.0	No
112146	FL8	ATLANTIC BURIAL CASKET CO. DBA ABCO	Palm Beach	584.56	2897.78	0.7	64.0	63.96		0.8	1279.2	No
990005	FL24	OKEELANTA SUGAR REFINERY	Palm Beach	524.9	2940.1	60.4	21.6	64.15		361.7	1283.1	No
990332	FL49	OKEELANTA COGENERATION PLANT	Palm Beach	524.9	2940.1	60.4	21.6	64.15		1,497.9	1283.1	Yes
1110071	FL68	FPL / ST LUCIE NUCLEAR POWER PLANT	Palm Beach	573.86	3025.01	11.4	-63.3	64.30		31.5	1286.0	No
111019	FL5	HOLY CROSS HOSPITAL	Palm Beach	587.09	2896.52	-1.8	65.2	65.24		8.8	1304.8	No

Note: Facilities in shaded cells are outside SIA + 50 km

**TABLE A-3
FINAL NO₂ NAAQS SOURCE INVENTORY**

Facility ID	Owner / Company Name	Site Name	SRC ID	UTM East (km)	UTM North (km)	Base Elevation (m)	EU ID	EU Description	Stack Height (m)	Diam (m)	Exit Temp (K)	Exit Vel (m/s)	Allowable (g/s)
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCCRF	SWAREFRB	585320	2961238	5.18	1	Municipal Solid Waste Boiler #1 & #2; based on 150 ppm; using effective diameter and merged flow	76.20	3.49	427.6	16.99	29.91
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCCRF	SWAFLR3	586002	2962673	5.18	4	Class III Landfill with Flare (1800 scfm)	10.67	0.41	1033.2	46.57	0.54
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCCRF	SWAFLR1	585800	2960200	5.18	8	Class I Landfill Flare (3500 scfm)	12.80	0.30	1033.2	15.73	1.05
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCCRF	SWABPF1	585652	2959900	4.88	10	Sludge Dryer Train #1 & #2	41.76	0.58	370.4	19.93	1.42
990234	SOLID WASTE AUTHORITY OF PBC	SOLID WASTE AUTHORITY OF PBC/NCCRF	SWAWWDE	585966.2	2961601.9	4.88	17	Woody Waste Facility Diesel Engine	4.27	0.25	754.3	56.75	1.90
990344	PARKWAY ASPHALT, INC.	PARKWAY ASPHALT / (RIVIERA BEACH)	PKASPO1	587360	2962140	4.27	1	1,200,000 gal/yr No. 2 FO; 4.28 lb/hr (based on 8760 hrs); if 45 hrs/wk then 16.03 lb/hr (18.75 tpy)	12.80	1.25	394.3	16.58	2.02
990344	PARKWAY ASPHALT, INC.	PARKWAY ASPHALT / (RIVIERA BEACH)	PKASPO2	587360	2962140	4.27	2	5 gal/hr No. 2 FO; Potential = 5 gal/hr * 24 lb/1000 gal = 0.12 lb/hr	4.57	0.08	422.0	6.10	0.02
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	FLPRIVCT	594249	2960632	3.05		CT Generators Unit 5 (Replaces Units 3 & 4)	45.42	6.71	453.7	22.42	30.24
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	FLPRIVFH	594249	2960632	3.05		Fuel Heater	9.14	0.30	533.2	16.15	0.12
990042	FLORIDA POWER & LIGHT (PRV)	FP&L / RIVIERA POWER PLANT	FLPRIVGC	594249	2960632	3.05		Gas Compressors	12.19	0.30	729.8	49.50	3.91
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	LAKWTHDG	592800	2943700	4.57	1	2000 KW DIESEL GENERATOR # 1 - #5 PEAKING UNITS	5.18	0.56	625.9	37.09	62.87
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	LAKWTHGT	592800	2943700	4.57	6	GAS TURBINE # 1 (435 MMBtu/hr; 0.9 lb/MMBtu FO & 0.5 lb/MMBtu NG)	14.02	4.88	720.4	24.84	49.39
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	LAKWTHU3	592800	2943700	4.57	9	FOSSIL FUEL STEAM GENERATOR #3 (Phase II, Acid Rain Unit, 325 MMBtu/hr; 0.5 lb/MMBtu)	34.44	2.13	418.2	15.67	20.54
990045	CITY OF LAKE WORTH UTILITIES	L.W. UTILITIES / TOM G. SMITH PWR PLANT	LAKWTHU5	592800	2943700	4.57	11	COMBINED CYCLE UNIT (GT-2/S-5) - 317.5 MMBtu/hr; 0.9 lb/MMBtu limit	22.86	3.05	479.8	26.67	36.04
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH16	561510	2975840	6.71	16	Boiler (BO-12-E6) w/heat input of 42 mMBTUH in Test Area E	4.57	0.76	533.2	6.71	0.76
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH22	568410	2975840	6.71	22	2 boilers (BO-1-MBH,BO-2-BMH); 54 MMBTU/Hr each, at BH	20.12	2.32	672.0	10.06	1.83
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH40	568410	2975840	6.71	40	Two furnaces (FU-3-MHT, FU-4-MHT), 6 MMBTUH each	13.41	0.91	1366.5	0.07	0.15
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH45	568410	2975840	6.71	45	Water evaporator (EV-1-MW) w/heat input of 0.2 MMBTUH	3.69	0.21	298.7	2.59	0.001
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH59	568410	2975840	6.71	59	Miscellaneous air and fuel heaters fired with natural gas	6.10	0.49	533.2	4.91	0.91
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH65	568410	2975840	6.71	65	Miscellaneous diesel engines driving generators, pumps, etc.	6.10	0.49	533.2	7.62	6.83
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH66	561510	2975840	6.71	66	Boiler (BO-14-E8) w/heat input of 7 MMBTUH, propane fired (in Area "E")	7.62	0.40	335.9	33.16	0.14
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH68	568410	2975840	6.71	68	Genset (Emergency Only?)	3.70	0.20	922.0	151.40	6.72
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH69	563195	2976027	6.71	69	Ten existing jet engine test stands located in Test Area A	5.49	3.69	422.0	0.08	23.40

TABLE A-3
FINAL NO₂ NAAQS SOURCE INVENTORY

Facility ID	Owner / Company Name	Site Name	SRC ID	UTM East (km)	UTM North (km)	Base Elevation (m)	EU ID	EU Description	Stack Height (m)	Diam (m)	Exit Temp (K)	Exit Vel (m/s)	Allowable (g/s)
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECHA10	568410	2975840	6.71	77	CT Test Stands	5.79	4.18	410.9	106.68	1.15
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH79	563259	2976003	7.01	79	Two JP8 fired Turbine Engines (GG4-9A)	7.92	1.80	672.0	60.96	37.78
990021	UNITED TECHNOLOGIES CORPORATION	UNITED TECHNOLOGIES / PRATT WHITNEY ACFT	UTECH80	561510	2975840	6.71	80	E-8 Rocket Engine Test Stand	22.86	0.41	410.9	106.68	0.12
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	WESTCT16	562190	2953040	6.10	1	250 MW Combined Cycle Combustion Turbine System - Unit 1A, 1B, 1C, 2A, 2B, 2C (EU 1 - 6)	45.42	6.71	359.8	17.53	62.29
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	WESTCT9	562190	2953040	6.10	9	One nominal 85,000 lb/hr (99.8 MMBtu/hour) auxiliary boiler	18.29	0.84	419.8	25.09	1.26
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	WESTCT10	562190	2953040	6.10	10	Two nominal 10 MW MMBTU/hr gas fired process heaters	9.14	0.30	533.2	32.00	0.12
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	WESTCT13	562200	2952600	6.10	13	250 MW CTG with supplementary fired HRSG - Unit 3A, 3B, 3C (EU 13, 14, 15)	45.42	6.71	363.7	18.17	31.15
990646	FLORIDA POWER AND LIGHT COMPANY	FP&L / WEST COUNTY ENERGY CENTER	WESTCT18	562000	2952000	6.10	18	Two nominal 2250 KW (~21 MMBtu/hr) emergency generators	9.14	0.30	764.3	112.96	0.12
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ATLSUG12	552980	2945420	3.66	1	Boiler 1 & 2 - 150,000 lb/hr steam rate each	27.43	1.89	344.3	16.82	31.75
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ATLSUG3	552980	2945420	3.66	3	Boiler 3 - 130,000 lb/hr steam rate	18.29	1.83	338.7	16.15	14.11
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ATLSUG4	552980	2945420	3.66	4	Boiler 4 - 125,000 lb/hr steam rate	27.43	1.83	338.7	16.15	14.06
990016	ATLANTIC HOLDING, LLC	ATLANTIC SUGAR MILL	ATLSUG5	552900	2945200	3.66	5	Boiler 5 - 115,000 lb/hr steam rate	27.43	1.68	338.7	19.23	5.14
990019	OSCEOLA FARMS	OSCEOLA FARMS	OSCF2	544710	2967550	4.26	2	BOILER #2 WITH 2 SCRUBBERS AND 2 STACKS	27.43	1.52	342.0	31.39	15.88
990019	OSCEOLA FARMS	OSCEOLA FARMS	OSCF3	544020	2968000	4.26	3	BOILER #3 WITH SCRUBBER	27.43	1.92	341.5	23.77	8.14
990019	OSCEOLA FARMS	OSCEOLA FARMS	OSCF4	544710	2967550	4.26	4	BAGASSE BOILER #4 (UNIT #5), 140,000 LBS/HR STEAM	25.60	1.83	340.9	12.50	15.88
990019	OSCEOLA FARMS	OSCEOLA FARMS	OSCF5	544710	2967550	4.26	5	165,000 LB/HR BAGASSE BOILER # 5 WITH 2 SCRUBBERS & 2 STACKS	27.43	1.52	340.9	31.39	18.71
990019	OSCEOLA FARMS	OSCEOLA FARMS	OSCF6	544020	2968000	4.26	6	BOILER #6 WITH SCRUBBER PSD	27.43	1.92	341.5	17.07	9.90
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN1	534870	2953860	3.35	1	BOILER #1 WITH 1 SCRUBBER AND 1 STACK	45.72	1.31	337.6	21.64	20.05
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN2	534870	2953860	3.35	2	BOILER #2 WITH 1 SCRUBBER AND 1 STACK	45.72	1.31	336.5	23.16	16.20
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN3	534870	2953860	3.35	3	BOILER #3 WITH 1 SCRUBBER AND 1 STACK	54.86	1.62	341.5	15.85	12.97
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN4	534870	2953860	3.35	4	BOILER #4 WITH 2 SCRUBBERS AND 1 STACK	54.86	2.90	343.7	15.33	32.38
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN5	534870	2953860	3.35	5	BOILER #5 WITH 2 SCRUBBERS AND 1 STACK	45.72	2.13	341.5	12.31	23.76
990026	SUGAR CANE GROWERS CO-OP	SUGAR CANE GROWERS CO-OP	SUGCN8	534870	2953860	3.35	8	BOILER # 8 WITH 2 SCRUBBERS AND 1 STACK	47.24	2.90	344.8	9.14	15.50

**TABLE A-3
FINAL NO₂ NAAQS SOURCE INVENTORY**

Facility ID	Owner / Company Name	Site Name	SRC ID	UTM East (km)	UTM North (km)	Base Elev (m)	EU ID	EU Description	Stack Height (m)	Diam (m)	Exit Temp (K)	Exit Vel (m/s)	Allowable (g/s)
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	MART12	543080	2993090	8.53	1	Fossil Fuel Fired Steam Generator #1 & #2 (Acid Rain, Phase II)	152.10	10.97	443.2	13.14	653.94
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	MART34	543270	2992610	8.53	3	Combustion Turbine with HRSG (CT 3A)(Acid Rain, Phase II) -	64.92	6.10	410.9	39.14	232.36
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	MARTAU	543900	2992670	8.53	7	Auxiliary Boiler	18.29	1.10	527.6	15.24	0.61
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	MARTDG	543200	2992710	8.53	9	Diesel Generator(0.718 MW for Units 003-006)	3.96	0.15	705.4	122.90	9.08
850001	FLORIDA POWER & LIGHT (PMR)	MARTIN POWER PLANT	MART8	543060	2997680	8.53	11	Unit 8A-8D - 170 MW gas turbine with gas-fired HRSG	36.58	5.79	367.6	17.98	160.88
990620	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	SFWMD / PUMP STATION 5-319	SFWMD319	566300	2951220	4.57	1	Five diesel engines and two emergency generators	17.68	0.46	616.5	33.41	21.256
990621	SOUTH FLORIDA WATER MANANGEMENT DISTRICT	SFWMD / PUMP STATION 5-362	SFWMD362	567210	2944980	4.57	1	Three - 1303 bhp and two - 839 hp diesel engines.	18.29	0.405	616.5	29.47	14.079

Base elevations estimated from Google Earth (data not provided by FDEP)

Note: These facilities screened out through modeling.

Facility ID	Owner / Company Name	Site Name	SRC ID	UTM East (km)	UTM North (km)	Base Elev (m)	EU ID	EU Description	Stack Height (m)	Diam (m)	Exit Temp (K)	Exit Vel (m/s)	Allowable (g/s)
850102	INDIANTOWN COGENERATION, L.P.	INDIANTOWN COGENERATION PLANT	INDTOWN1	547650	2990700	9.45	1	Pulverized Coal Main Boiler	150.88	4.88	333.2	28.41	73.33
850102	INDIANTOWN COGENERATION, L.P.	INDIANTOWN COGENERATION PLANT	INDTOWN3	547650	2990700	9.45	7	Aux Boilers (2)	64.01	1.52	561.5	37.92	1.01
112120	WHEELABRATOR NORTH BROWARD, INC. ¹	WHEELABRATOR NORTH BROWARD	WHEELIN	583900	2907600	3.05	1	807 TPD MSW Combustor & Auxiliary Burners- Unit 1, 2, 3	59.44	2.29	422.0	19.45	40.26

Note:

1. Wheelabrator N. Broward was initial outside the SIA = 50 km distance but left in for conservatism.

B-1. Determine Compliance with 1-Hour NO₂ Standard

USEPA has not yet developed incorporated programs to determine the 98th percentile of the maximum daily 1-hour NO₂ impact within AERMOD. Therefore, a commercial post-processing program (*BREEZE 3DAnalyst*) was used to determine compliance with the 1-hour NO₂ NAAQS. The *3DAnalyst* program requires that a POSTFILE containing the hourly NO₂ impacts at each receptor for the ALL source group be developed during the AERMOD modeling analysis for each year of the meteorological data. The post-processing program then calculates the maximum daily 1-hour concentration at each receptor and each day from the hourly NO₂ predicted concentration data using the Extract Maximum Daily function. The post-processing then determines the 8th highest daily 1-hour concentration from each year for each receptor from the Maximum Daily data using the Extract Highs function (using a value of 8 to represent 8th highest) in *3DAnalyst*. The 8th high daily 1-hour maximum impacts were then copied into an EXCEL file where the 5-year average at each receptor is determined. The reported value is the maximum 8th highest daily 1-hour impact from all of the modeled receptors in the multisource analysis.

B-2. Determine Source Contribution

Following USEPA guidance, the source under review must show that its potential emissions will not cause or contribute to an exceedance of the NAAQS. The full, cumulative, multisource analysis indicated potential modeled exceedances of the 1-hour NO₂ NAAQS at the receptor locations where the Proposed Facility (PBREF2) was initially shown to be significant (i.e., had impacts equal to or exceeding the proposed 1-hour SIL for NO₂). To demonstrate compliance with the standard, PBREF2 must show that at any potential modeled exceedance of the standard in both space and time (i.e., at a receptor location and hour of day), PBREF2's modeled concentration is below the SIL (i.e., determined to be insignificant). Since the new 1-hour NO₂ NAAQS is a 5-year average of the maximum daily concentration, the analysis conservatively looked at each individual hour where the cumulative impact was modeled to be greater than the NAAQS (189 µg/m³). The following steps were followed to determine if the maximum impacts from PBREF2 were insignificant at these receptors and times.

Step 1 – In the full multisource impact modeling, a MAXIFILE was requested in AERMOD for both the ALL (final source inventory and PBREF2) and PBREF2 source groups. The MAXIFILE for the ALL source group had a threshold set at 81µg/m³. This threshold will identify all of the modeled 1-hour NO₂

concentrations (using Tier 1) that are equal to or greater than the NAAQS accounting for the maximum 1-hour ambient background concentration of $108 \mu\text{g}/\text{m}^3$.¹ The threshold for the PBREF2 source group was set at the SIL level (using $7.55 \mu\text{g}/\text{m}^3$ as the SIL threshold). Therefore, two output files were developed with one having predicted impacts greater than the standard when background is added, and the other with all hours and locations when PBREF2 is significant.

Step 2 – Each MAXIFILE was imported into an MS EXCEL spreadsheet, each containing lookup functions. These spreadsheets converted the Tier 1 NO₂ concentration to Tier 2, and then added the maximum background concentration ($108 \mu\text{g}/\text{m}^3$) to the predicted impact for each hour. The lookup table then determined if the Tier 2 concentration plus background exceeded the 1-hour NO₂ NAAQS. If the table indicated that the 1-hour NO₂ NAAQS was equaled or exceeded, it then searched for the corresponding receptor and hour from the PBREF2 MAXIFILE and reported back a PBREF2 concentration if it was equal to or greater than the 1-hour NO₂ SIL. If there were no corresponding values in the PBREF2 MAXIFILE that equaled or exceeded the SIL, then the cell reported the phrase “< SIL”. This process is repeated for each of the 5 years of meteorological data, and then summarized for each year.

B-3. Determine Maximum Predicted Impact When PBREF2 is Significant

The next part of the analysis determines the maximum 1-hour NO₂ concentration from the cumulative multisource impact analysis when PBREF2 is significant (both in time and space). This analysis uses the POSTFILES (in ASCII format) for both the ALL and PBREF2 source groups. Due to the large size of the POSTFILES (more than 1 million lines), a short program was developed to read and process the POSTFILES. This program reads the POSTFILE associated with the 1-hour concentrations for PBREF2 and determines if the reported concentration for each hour is equal to or greater than the proposed NO₂ SIL. If an hour's predicted concentration is equal to or greater than the SIL, the concentration for that same hour and receptor location is extracted from the ALL source group POSTFILE and reported in an output file (e.g., MaxSig01.out, text file). This output file resembles the ASCII POSTFILE for the PBREF2 source group with the exception that an additional column has been added to report the corresponding receptor and hour's ALL source group's concentration. In addition, this POSTFILE contains only those hours when PBREF2 is significant. This process was conducted for each of the 5

¹1-hour NO₂ Threshold (NAAQS) = $189 \mu\text{g}/\text{m}^3 - 108 \mu\text{g}/\text{m}^3$ (maximum 1-hour background concentration) = $81 \mu\text{g}/\text{m}^3$.

years of meteorological data. These five files are then imported into EXCEL, and the maximum 1-hour concentration from the cumulative impact analysis when PBREF2 is significant is determined. The highest ambient monitored background concentration ($108 \mu\text{g}/\text{m}^3$) is then added to highest 1-hour NO_2 cumulative impact from the 5 years of meteorological data and reported in the results section of the report



Solid Waste Authority of Palm Beach County

**Air Quality Modeling Files for 1-hour CO
and SO₂ NAAQS Analyses**

**MALCOLM
PIRNIE**