ENVIRON

July 18, 2013

VIA FEDEX

Jeff Koerner, Administrator
Office of Permitting and Compliance
Division of Air Resources Management – DEP
2600 Blair Stone Road, Mail Station 5505
Tallahassee, FL 32399-2400

Re: Response to RAI & Amendment to PSD Revision Application
EnviroFocus Technologies – Tampa, Florida
Permit ID: 0570057-030-AC (PSD-FL-404C)

Dear Mr. Koerner:

On behalf of EnviroFocus Technologies, LLC (EFT), ENVIRON International Corporation (ENVIRON) is submitting the enclosed response to the Request for Additional Information (RAI) sent by Florida Department of Environmental Protection (DEP) to EFT on May 14, 2013 and an amendment to EFT's permit application submitted to DEP on April 19, 2013. The response to the RAI includes a response to a comment form Hillsborough County Environmental Protection Commission (EPC) that was not contained in DEP's RAI, but was in a memo from EPC that was forwarded by DEP. The permit enclosed application amendment is being submitted for the following changes to the permit application submitted on May 14, 2013 and Permit ID 0570057-027-AC (PSD-FL-404B):

- Revision of the process stack NOx emission limit requested in the permit application
- Revision of the format of the SO_2 emission limits on the process and hygiene stacks currently in permit 0570057-027-AC (PSD-FL-404B)

NOx Emission Limit Revision

Despite installing and operating the controls deemed BACT on the Feed Dryer, Reverb Furnace, Blast Furnace, EFT is unable to achieve the total limit of 38.4 lb/hr previously proposed. Based on data obtained from the NOx CEMS on the process stack the lowest limit achievable is 42.2 lb/hr. Therefore, EFT is requesting an increase in the NOx emission limit proposed in the April permit application for the process stack from 38.4 lb/hr to 42.2 lb/hr. Accordingly, the NOx modeling has been rerun at the newly-proposed emission rate. This modeling also included the previously proposed reduction on the hygiene stack NOx emission rate to 5.0 lb/hr. A report of the results of the revised modeling is enclosed. The application forms affected by this change are also included.

SO2 Emission Limit Revision

Additionally, EFT is requesting a change in the format of the existing SO_2 limits on the process and hygiene stacks. These stacks are currently limited by the permit to 163.9 lb/hr and 38.34 lb/hr, respectively. The underlying regulatory purpose of these limits is to restrict the potential

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SO_2 emissions increase resulting from the plant expansion to a level below the PSD major modification threshold.

As described in a previous permit application submitted to DEP in July 2012, the source of the SO_2 is primarily from the furnaces. Most of the SO_2 is ducted directly an SO_2 scrubber which exhausts from the process stack. However, some SO_2 is emitted fugitively from various openings in the furnaces and captured by the hygiene hooding which emits from the hygiene stack. The amount of fugitive SO_2 fluctuates significantly depending during furnace operations causing a high degree of variability in SO_2 between the two stacks. EFT can easily keep the total emissions below the PSD triggering threshold by adjusting the control efficiency of the scrubber, but it is difficult to maintain a particular split in emissions between the stacks. As a solution to this issue, EFT is requesting that DEP combine the SO_2 limits on the process and hygiene stacks into one limit of 202.24 lb/hr (163.9 + 38.34). EFT will continue to demonstrate compliance using the continuous monitors on these stacks.

If you have any questions, please don't hesitate to contact me at 828-254-0016.

Sincerely,

Frank J. Burbach, PE
Senior Manager

Enclosures: Revised Application Forms (4 copies)
Revised NOx Modeling Report (4 copies)
Response to RAI (1 copy)

Copy: Angela Fogarty, EnviroFocus Technologies, LLC

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Response to Request for Additional Information
File Number: 0570057-030-AC (PSD-FL-404C)

The following information is being submitted in response to a request for additional information (RAI) from Florida Department of Environmental Protection (DEP) dated May 14, 2013. Also included is a response to a comment from the Hillsborough County Environmental Protection Commission (EPC) that was submitted to DEP on May 7, 2013, but was not included in the RAI from DEP. DEP and EPC's comments are reiterated in italics for the sake of convenience. Additional information is attached to supplement the responses, where needed.

Process Rate revisions for the Refining/Casting, Furnace, and Battery Breaking Processes

1. *In the Application narrative, Section 5, EFT is proposing to revise the hourly process rate for the refining and casting operations from 20 TPH to 66 TPH for the purposes of operating at maximum capacity during stack testing, and 1,584 TPD for the purposes of demonstrating continuous compliance with the lead production rate. Similarly, EFT is proposing to manually monitor the furnace process rates (material input and heat input rates) for the purposes of stack testing, and is also proposing new daily process rates in order to demonstrate continuous compliance with the furnace process rates. A limit of 960 TPD was proposed for the feed dryer and reverb furnace, and 180 TPD for the blast furnace.*

   Per Table 15.1 - Typical Composition of Components in Battery Paste from Valve-Regulated Lead-Acid Batteries © 2004 by Rand, Moseley, Garche, and Parker, the typical average battery paste composition by weight is 57.5% lead sulfate, 32.5% lead dioxide, 2.5% metallic lead, and 7.5% other. Therefore, the overall percentage of elemental lead in battery paste is approximately 70% by weight. Performing a material balance on the smelting processes shows that the annual smelting capacity at 8,760 hours per year is about 312,491 TPY of elemental lead based on the 40 TPH process rate for the reverberatory furnace and the 7.5 TPH process rate for the blast furnace. The hard and soft lead produced in the smelting processes is sent to the refining kettles for further purification and alloying.

   Pursuant to Rule 62-4.070(1), F.A.C., in order to properly limit the lead production rate from the refining operations, EFT should provide the minimum residence time for the refining kettles (on a ton basis) for soft lead, hard lead, and lead alloys, in order to determine the maximum hourly process rate for this operation. In regards to the furnace operation, EFT should explain the procedures for the proposed manual monitoring to determine the furnace and feed dryer process rates. [Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]

Response:

The smelting capacity of the plant cannot be determined based solely on the lead composition of the paste and the maximum short-term input rates to the furnaces. The feedstocks to the furnaces contain other materials, such as solid lead battery components, coke for use as fuel or reductant, and, in the case of the blast furnace, lead-bearing slag from the reverb furnace, cast iron, and fluxes. Also, the furnaces throughput rates will vary depending on several variables. They cannot be operated continuously at their maximum short-term rates nor can they be operated uninterrupted throughout the year. They are shutdown at scheduled intervals for routine maintenance and

occasional malfunctions of the furnaces or the equipment upstream or downstream of the furnaces. Based on the overall design of the plant and the constraints under which the equipment can be operated we estimate that the plant will be capable of making approximately 150,000 tons of lead per year.

Regarding residence time in the kettles, it is important to understand the nature of the operation before discussing the correlation between minimum residence time in a kettle and the overall process rate of the refining operations. The refining process consists of 10 kettles, two of which have a capacity of 150 tons each, while the remaining eight have a capacity of 100 tons each. The two larger kettles are used to receive molten lead from the furnaces and distribute the lead to the eight smaller kettles as needed. The refining and alloying takes place in the smaller kettles. The residence time in any one of these kettles depends on the composition of the molten lead being charged to the kettle and specifications of the desired product. It could be anywhere from 8 to 15 hours. The lead in each of the kettles is refined independently from the others and the lead in any given kettle may be held for a period of time awaiting casting. Although a theoretical maximum process rate could be determined using the minimum residence times, it would not correlate well with an actual maximum process rate in practice due to the nature of the operation. Further, because the residence time is so long, it would be very difficult to monitor the process rate during a three-hour stack test. For this reason, EFT has suggested in its permit application that the process output rate, casting rate, which is more easily measured, be used to characterize the process rate of refining during stack testing. A maximum casting rate of 66 ton/hr was provided for this purpose.

EFT's current plan for monitoring the process rates for the furnaces and feed dryer is to manually read and record meter readings and monitor the system with employees out at each unit. Please note that EFT requests that specific process monitoring procedures not be specified in the permit in the event that a better solution for monitoring the process rates presents itself.

2. *On Page 90 of the Application, the maximum annual rate for lead refining is listed as 175,000 TPY of lead refined, while the PSD permits (PSD-FL-404A and 404B) and the Application narrative specify a maximum of 150,000 TPY lead refined. Also, on the same page, the maximum hourly process rate for refining is listed as 20 TPH, but Page 88 lists the maximum hourly process rate as 25 TPH. Based on the review of the original PSD permit application and original PSD permit, the potential emission calculations for lead refining were based on a long-term process rate of 16.67 TPH which is equivalent to approximately 146,000 TPY lead refined. Pursuant to Rule 62-4.070(1), F.A.C., EFT should explain the discrepancies in the maximum annual and hourly production rates, and how any changes to the original design have affected or will affect the actual emissions and PTE for the facility, and submit revised application pages, as necessary.*
   [Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]

Response:

The value of 175,000 ton/yr on page 90 is simply the annual equivalent of 20 ton/hr at 8,760 hr/yr. EFT does not intend to exceed the allowable 150,000 ton/yr limit in the permit. A revised copy of page 90 showing an anticipated maximum production rate of 150,000 ton/yr is included in Attachment A. The hourly process rate of 20 ton/hr is the estimated hourly process rate of the refining operations. As described in the response to Comment No. 1 above, it is difficult to determine an hourly rate due to the nature of the refining operation. For the sake of consistency, EFT is including a revised version of page 88 showing a process rate of 20 ton/hr in Attachment A. Please note that none of the emission rates presented in this application or in previous applications are based on the process rate of refining. The particulate matter and lead emissions are based on the air flow of the Hygiene Baghouse and the maximum outlet concentrations of the pollutants from the Hygiene Baghouse. The NOx and SO2 are based on the anticipated maximum usages of refining materials containing nitrogen and sulfur.

3. *EFT is proposing to monitor the batteries per day input rate to the battery breaking process in order to demonstrate continuous compliance with the maximum 60 TPH process rate in the PSD Permit. The proposed limit is 1440 TPD which is derived by multiplying 60 TPH by 24 hours per day. However, the annuol battery input rate is limited to 438,000 tons per 12-consecutive month period (annual average of 50 TPH). Please explain how the 1,440 TPD limit can be reconciled with the annual average hourly limit of 50 TPH. Furthermore, in regards to the stack testing of the battery breaking operation, EFT should explain the procedures for the proposed manual monitoring to determine the battery input rate.*
[Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]

Response:

The proposed limits of 60 ton/hr, 1,440 ton/day, and 438,000 ton/yr represent maximum battery breaking process rates. As stated in the comment, the value of 50 ton/hr is the average process rate that is equivalent to the annual limit of 438,000 ton/yr . In other words, the annual process rate limit of 438,000 divided by the number of hours in a year (8,760) yields an annual average rate of 50 ton/hr. There may be periods when the 50 ton/yr average is exceeded, but EFT will not process more than the specified limit of 1,440 tons on any given day. This daily limit is equivalent to 60 ton/hr times 24 hr/day.

EFT plans to monitor the battery input rate to the battery breaking process during tests manually with an employee standing at the pallet dumper at the apron feeder. Ongoing production monitoring will be accomplished on a daily basis by manually counting pallets per day to estimate the amount of batteries broken.

However, as noted in the response to Comment No. 1 above, EFT requests that this monitoring method not be incorporated into the permit, so as not to preclude improved monitoring methods from being used should they become available.

Alternate Chemical Reagent Usages in the Desulfurization Process and the Furnace Scrubber

4. *In Section 3 of the Application narrative, EFT is proposing to use alternate chemical reagents in the desulfurization process and the furnace process scrubber. Currently, soda ash (Na2CO3) is used in the desulfurization process, and liquid caustic (NaOH) is used in the furnace process scrubber. EFT is requesting to be able to switch the reagents, as necessary to demonstrate compliance with the permitted SO2 limits. In addition, EFT is requesting to use the general term "alkaline reagents" to allow the facility to use other reagents than soda ash and liquid caustic in these two processes.*

   The use of sodium hydroxide in the desulfurization process results in the formation of lead oxide (PbO) instead of lead carbonate (PbCO3). According to Chapter 15 of Valve-Regulated Lead-Acid Batteries © 2004 by Rand, Moseley, Garche, and Parker, each of the [desulfurization] processes offers some advantages over the other, in terms of sulfate conversion, solubility of additives, or formation of unwanted insoluble salts. EFT should provide data on the sulfate conversion for each of the alkoline reagents being proposed for use in the process. In addition, based on these conversions, EFT should quantify the effect of the different reagents on the SO2 emissions from the furnaces. Furthermore, based on the information provided in the Application, it was unclear what the effects would be on production and emissions of other pollutants due to the processing of lead oxide instead of lead carbonate and subsequent processing by the blast and reverberatory furnaces. In the desulfurization process, additional water is formed in the reaction from the use of sodium hydroxide which must be removed prior to further processing which could result in processing changes in the feed dryer and furnaces. Any physical changes and/or process rate changes from the chemistry difference as well as any emissions changes should be addressed accompanied by the relevant calculations. Also, if any of the emissions from the desulfurization process are directed to emissions control devices, the effects on the emissions from the reagent changes should be addressed. [Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]

Response:

Although there are differences in the reactions when using different reagents in the desulfurization process and in the furnace scrubber, EFT has the operational capability and the continuous monitoring necessary to maintain compliance with the sulfur dioxide limit at the process stack, regardless of what reagent is used. In other words, any reduction in desulfurization effectiveness can be countered by the use of additional reagent at the scrubber to maintain the same sulfur dioxide emission rate. The process stack is equipped with a continuous SO2 emissions monitor that EFT will use to ensure that the limit is maintained. EFT is not requesting the use of any reagents that would prohibit compliance with the limit.

The differences in the emissions of other pollutants from the furnaces resulting from the introduction of paste that has been converted to lead oxide rather than lead carbonate is negligible. Also, the additional formation of water when using caustic soda instead of soda ash in the

desulfurization process has no bearing on the resulting water content of the desulfurized paste, because the process is performed in a slurry that already has a high water content. After the desulfurizing reactions have taken place, the paste is separated from the water by a filter. Therefore, the dryer's operation is unaffected by the use of different desulfurizing chemicals.

Afterburner Heat Input Capacity

5. *In Section 4 of the Application narrative, EFT is identifying the heat input capacity of the new furnace process afterburner, which is 10 MMBtu/hr. EFT should provide engineering design calculations for the afterburner which show how the furnace afterburner heat input rate was determined. [Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]*

Response:

The exact heat input capacity needed to meet the emission limit cannot be determined due to the complexity of the system and the variables involved. For example, mixing and temperature uniformity in the afterburner play an important part in the oxidation process, but are difficult to determine accurately on paper. EFT feels confident based on our knowledge of the process and the experience gained at the facility's sister plant in Eagan, Minnesota that the heat needed will not exceed 10 mmBtu/hr. The burner will only be operated at the firing rate needed to maintain compliance with emission limit.

Secondary Lead Smelter NESHAP Revisions

(Originally Comment No. 7 in EPC's Memo to DEP dated May 7, 2013)

A rule revision to 40 CFR 63, Subpart X – National Emissions Standards for Hazardous Air Pollutants was promulgated on January 5, 2012. The revised rules, including the new dioxin/furan standard, the THC standards, and work practice standards, etc., should be incorporated into EFT's PSD permit language, in addition to the MACT attachment. More specifically, Specific Condition 10. in Subsection C, states that the VOC emissions from the hygiene stack (EU 033) shall not exceed 20 parts per million or 8.95 lbs/hr as demonstrated by initial test on the hygiene stack. This emission standard as specified in the permit should be consistent with the MACT, which states that the THC concentration is to be corrected to 4% CO_2 as specified in 63.543(c) and Table 2 of Subpart X. EFT conducted their initial THC compliance test on December 7, 2012, which showed a THC concentration of 19.3 parts per million, which was not corrected to 4% CO_2.

It is EFT's position that the requirement for a CO2 correction on process fugitives emissions such as those associated with EFT's hygiene stack is erroneous. A petition has been made to EPA for reconsideration of this requirement by the Association of Battery Recyclers, Inc. (see

Attachment B). We respectfully request that you contact Mr. Nathan Topham at USEPA (919-541-0483) regarding this petition before adding the CO2 correction requirement to EFT's permit.

Attachment A

Revised Pages 88 and 90 from the
Permit Application - Appendix A "Application Forms"

Attachment B

Supplemental Petition for Reconsideration of the
NESHAP for Secondary Lead Smelting

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **20 ton/hr (refining)**	
2. Maximum Production Rate: **66 ton/hr (casting)**	
3. Maximum Heat Input Rate: **NA** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 7 days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Lead Refining**		
2. Source Classification Code (SCC): **30400426**	3. SCC Units: **Tons of lead refined**	
4. Maximum Hourly Rate: **20**	5. Maximum Annual Rate: **150,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

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April 29, 2013

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VIA OVERNIGHT DELIVERY

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Re: *Supplemental Petition of the Association of Battery Recyclers, Inc. for Reconsideration of the* National Emission Standards for Hazardous Air Pollutant Emissions from Secondary Lead Smelting, *77 Fed. Reg. 556 (Jan. 5, 2012)*

Dear Mr. Perciasepe:

Enclosed with this letter, please find the Association of Battery Recyclers, Inc.'s supplemental petition for reconsideration of the *National Emission Standards for Hazardous Air Pollutant Emissions from Secondary Lead Smelting*, 77 Fed. Reg. 556 (Jan. 5, 2012).

Please contact me if you have any questions. Thank you for your assistance in this matter.

Sincerely yours,

Robert N. Steinwurtzel

Enclosures

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Supplemental Petition of the Association of Battery Recyclers for Administrative Reconsideration of the National Emission Standards for Hazardous Air Pollutants: Secondary Lead Smelting, 77 Fed. Reg. 556 (Jan. 5, 2012)

Docket EPA-HQ-OAR-2011-0344

April 29, 2013

Submitted By:

BAKER HOSTETLER

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I. Summary

The Association of Battery Recyclers, Inc. ("ABR") hereby requests that the U.S. Environmental Protection Agency ("EPA") reconsider the four percent carbon dioxide correction factor for the total hydrocarbon limit for furnace charging process fugitive emissions at 40 C.F.R 63.543(f) of its National Emission Standards for Hazardous Air Pollutants: Secondary Lead Smelting, 77 Fed. Reg. 556 (Jan. 5, 2012) (the "Secondary Lead Rule" or the "Rule").[1] The ABR is a non-profit trade association of companies that are involved in smelting and refining lead-acid batteries and other lead-bearing materials. Members of the ABR include companies that own and/or operate battery manufacturers, lead chemical manufacturers, secondary lead smelters, a primary lead smelter, lead fabricators, and consultants and vendors to the lead recycling industry. The lead recycling industry members of the ABR collectively represent virtually all of the lead recycling capacity currently available in the United States.[2]

The purpose of applying a carbon dioxide correction factor to certain

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[1] This petition for reconsideration is filed in the Secondary Lead Rule docket. The ABR respectfully requests that the EPA reconsider the Secondary Lead Rule on the grounds discussed in this petition. Moreover, but not to the exclusion of considering the instant petition as a request for reconsideration, EPA may also consider it to be a petition for administrative action under the First Amendment to the United States Constitution and 5 U.S.C. § 553(e).

[2] This petition is without prejudice to the legal claims that the ABR is asserting in its pending petition for judicial review of the Secondary Lead Rule. *See Association of Battery Recyclers, Inc. v. U.S. Environmental Protection Agency*, No. 12-1129 (D.C. Cir. filed

emissions is presumably to preclude smelters from meeting the Rule's concentration-based emission limits by introducing dilution air. But the process vent regulated by this section includes furnace charging process fugitive emissions, which by their nature draw air from the facility that contains little to no carbon dioxide. Moreover, EPA introduced the carbon dioxide correction factor for furnace charging emissions into the final rule without any notice or any technical basis. As a result, the four percent carbon dioxide correction factor lacks any technical basis, will be impracticable (and very likely impossible) for any affected source to comply with, and was added to the Secondary Lead Rule without the proper opportunity for public comment. The ABR requests that EPA reconsider this aspect of the Rule and eliminate the carbon dioxide correction factor from the total hydrocarbons ("THC") emission standard for furnace charging process fugitive emissions.

II. Background

The Secondary Lead Smelting industry has been regulated under the Clean Air Act's Section 112 air toxics program since 1995. *See* 60 Fed. Reg.32,587 (June 23, 1995)]. Under the standards that existed before its risk and technology review of the original national emission standards for hazardous air pollutants ("NESHAP") from the secondary lead smelting industry, EPA measured furnace charging process fugitive emissions with no carbon dioxide correction factor:

Mar. 5, 2012); *Association of Battery Recyclers, Inc. v. U.S. Environmental Protection Agency*, No. 12-1373 (D.C. Cir. initiated Sept. 17, 2012).

> If the owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace does not combine the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then exhaust shall not contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane.

40 C.F.R. § 63.543(g)(2001).[3]

In EPA's proposed revisions to the Secondary Lead Rule on May 19, 2011, 76 Fed. Reg. 29,031 (May 19, 2011), the Agency proposed to retain the existing THC emission limit for furnace charging hoods:

> If you do not combine the furnace charging process fugitive emissions with the furnace process emissions, and discharge such emissions to the atmosphere through separate emissions points, you must maintain the total hydrocarbons concentration in the exhaust gas at or below 20 parts per million by volume, expressed as propane.

76 Fed. Reg. at 29,072 (proposed to be codified at 40 C.F.R. § 63.543(e)). EPA did not request comment on this standard, nor did the Information Collection Request on which the proposed rule was based require that smelters provide information on process vents containing furnace charging process fugitive emissions.

In the final rule, however, EPA changed the regulatory language applicable to furnace charging process fugitive emissions to add a carbon dioxide correction factor:

> If you do not combine the furnace charging process fugitive emissions with the furnace process emissions, and discharge such emissions to the atmosphere though

[3] EPA did not set THC limits for other furnace types in its original NESHAP.

> separate emissions points, you must maintain the total hydrocarbons concentration in the exhaust gas at or below 20 parts per million by volume, *expressed as propane and corrected to 4 percent carbon dioxide.*

77 Fed. Reg. at 582 (emphasis added) (codified at 40 C.F.R. § 63.543(f)). EPA did not mention this change in the preamble to the final rule or in its response to comments.

III. The Carbon Dioxide Correction Factor Lacks Technical Support

The purpose of applying a carbon dioxide correction factor to certain emissions is presumably to preclude smelters from meeting the Rule's concentration-based emission limits by introducing dilution air. But the emission limit for process fugitive emissions was set without reference to carbon dioxide correction and there is no technical information in the record supporting the application of a correction factor.

The requirement that sources employ process fugitive hooding to capture fugitive emissions from furnace charging processes was originally mandated at 40 C.F.R. 63.544(a)(1) (2001). It was intended to capture fugitive emissions from "[s]melting furnace and dryer charging hoppers, chutes, and skip hoists" by either total enclosure or the placement of hooding with an in-draft face velocity of at least 300 feet per minute. *Id.* The original concentration-based limitation on THC from furnace charging was set by EPA without carbon dioxide correction:

> based on emission testing performed on the blast furnace charge hood at the GNB secondary lead smelter located in Columbus, Georgia (Docket ID No. II-A-6). THC measurements at the GNB-Columbus smelter found THC

> concentrations ranging from 9 to 16 parts per million by volume on a dry basis (ppmvd) as propane . . . .
>
> Based on the available data, THC emissions from the blast furnace charging hoods with proper furnace draft can range from 1 to 20 ppmv. The EPA is amending the emission limit for THC emissions from blast furnace charging hoods to 20 ppmv based on the available data.

63 Fed. Reg. at 45009-10 (Aug. 24, 1998). There is no mention of carbon dioxide correction in this discussion or in the emission limitation for which it provided the basis. Moreover, the testing report in question indicates that the "9 to 16" ppmvd range of THC results were values not corrected for carbon dioxide content based on a detailed review of the raw testing data and calculations. *See* GNB Test Report, Attachment A.

EPA did not collect new technical data on process fugitive emissions from furnace charge hoods in the risk and technology review for the secondary lead smelting industry. Consequently, there were no new data generated for consideration regarding this standard during the rulemaking process, and the only basis for the emission limitation is the GNB-Columbus data from the original rulemaking, which did not include carbon dioxide correction. Therefore, there is no technical basis for adding a carbon dioxide correction to the emission limit for process fugitive emissions.

IV. Compliance With The Carbon Dioxide Correction Factor Is Infeasible

Compliance with a furnace charging process fugitive THC emission limitation

that is corrected to four percent carbon dioxide is infeasible. The process vent regulated by this section draws air from the smelter building that contains little to no carbon dioxide. Introducing a four percent carbon dioxide correction factor thus increases the stringency of the standard by approximately an order of magnitude. As a result, compliance with the unannounced change to the THC emission limit will be infeasible.

The purpose of a carbon dioxide correction factor is presumably to ensure that smelters do not meet the Secondary Lead Rule's concentration-based emission limitations by diluting furnace exhaust with excess ventilation air. Accordingly, EPA's original and revised NESHAP for the secondary lead smelting industry correct furnace exhaust emissions, which contain THC from incomplete combustion and carbon dioxide from complete combustion, to four percent carbon dioxide. *See* 40 C.F.R. § 63.543(c) (2001); Table 2 to Subpart X of Part 63, 77 Fed. Reg. at 590.[4]

In contrast, the vent for charging process fugitive emissions is primarily a dust control measure. By their very design, the ventilation systems serving these charging chute hoods are intended to draw in large amounts of fresh air in order to capture potential fugitive lead dust. The presence of large amounts of fresh air, containing little or no carbon dioxide, is not in this case an indication of inappropriate dilution – it is consistent with the very purpose of the ventilation systems used to control process fugitive emissions. Thus, while the carbon dioxide correction factor

maintains a level playing field relative to the amount of fresh air drawn into the furnace process exhaust, correction of the THC measurements for charging process fugitive ventilation exhaust streams is inappropriate and at cross-purposes with the intent of the limitation.

The carbon dioxide content of the air collected by the hood for capturing charging process fugitive emissions is consistent with general atmospheric conditions, currently just under 400 ppm or 0.04%.[5] The very testing of the GNB furnace charging hood upon which this concentration-based THC limitation is based measured 0.0 percent carbon dioxide. *See* GNB Test Report, Attachment A. Thus, the four percent carbon dioxide correction to the THC measurement would be substantial and likely on the order of a factor of ten. The carbon dioxide correction therefore artificially inflates the THC test and makes compliance with the THC limitation of 20 ppmv all but impossible.

V. EPA Should Reconsider The Emission Limit At 40 C.F.R. § 63.543(f) To Eliminate The Carbon Dioxide Correction Factor

EPA should reconsider the emission limit at 40 C.F.R. § 63.543(f) and should eliminate the carbon dioxide correction factor. First, reconsidering the carbon dioxide correction factor is an appropriate exercise of EPA's inherent authority to

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[4] The ABR is not seeking reconsideration of these process vent emission limitations.

[5] With the introduction of small amounts of THC into the process fugitive ventilation systems (on the order of tens of ppmv, per the standard), there would still not be enough carbon dioxide accompanying that THC from the furnace "leakage" to

reconsider the rule. *See, e.g.*, 75 Fed. Reg. 82,430, 82,436 (Dec. 30, 2010). Second, under Clean Air Act § 307(d)(7)(B), the Administrator is required to convene a proceeding to reconsider a final rule upon a timely petition demonstrating that it was impracticable to raise an objection that is of central relevance to the outcome of the rule during the period for public comment. Clean Air Act § 307(d)(7)(B) generally applies to petitions for reconsideration brought within sixty days of the final rule. But given the facts underlying this petition, where the ABR's members only discovered the erroneous addition of a carbon dioxide correction factor to the emission limit at 40 C.F.R. § 63.543(f) within the past sixty days because the change was made only to the final regulatory code section without any notice in the notice of proposed rulemaking or final regulatory preamble and this petition was filed as soon as possible thereafter, reconsideration under Section 307(d)(7)(B) is appropriate as well.

As described above, compliance with the emission limitation set forth at 40 C.F.R. § 63.543(f) will be infeasible, and almost certainly impossible, if it includes the erroneous carbon dioxide correction factor. Accordingly, if the EPA cannot complete a notice-and-comment reconsideration proceeding on this issue by the January 6, 2014 compliance date, good cause exists for the EPA to act by direct final rule. Although the procedural rulemaking requirements of Clean Air Act § 307(d) apply generally to the Secondary Lead Rule, *see* 42 U.S.C. § 7607(d)(1)(C), that

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appreciably change the carbon dioxide content of the fresh air stream being purposely drawn into the hooding to levels approaching four percent.

provision provides that it "shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of title 5," 42 U.S.C. § 7607(d)(1). Given this clear error in the application of a carbon dioxide correction factor to the emission limitation set forth at 40 C.F.R. § 63.543(f), EPA should find that good cause exists for dispensing with the procedural requirements of Clean Air Act § 307(d) because public comment is unnecessary for such a technical correction.

VI. Conclusion

For the reasons described in this Petition, the ABR respectfully requests that EPA reconsider the emission limit at 40 C.F.R. § 63.543(f) to eliminate the carbon dioxide correction factor. Should EPA not complete the reconsideration process by the January 6, 2014 compliance date, the ABR requests that EPA stay this aspect of the Rule in the interests of justice pursuant to APA § 705, 5 U.S.C. § 705.

Dated: April 29, 2013

Respectfully submitted,

Robert N. Steinwurtzel
Mark W. DeLaquil
BAKER & HOSTETLER LLP
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1050 Connecticut Avenue, N.W.
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mdelaquil@bakerlaw.com

Counsel for Petitioner Association of Battery Recyclers, Inc.

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : **John O. Tapper, Senior Vice President Chief Sustainability Officer**

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **EnviroFocus Technologies, LLC**
   Street Address: **6505 Jewel Avenue**
   City: **Tampa** State: **Florida** Zip Code: **33619**

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(651) 405 - 2203** ext. Fax: **(651) 454 - 7926**

4. Owner/Authorized Representative E-mail Address: **john.tapper@gopherresource.com**

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

Signature

7/15/13
Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Frank Burbach**
   Registration Number:
2. Professional Engineer Mailing Address...
   Organization/Firm: **ENVIRON International Corporation**
   Street Address: **1 Page Avenue**
   City: **Asheville** State: **NC** Zip Code: **28801**
3. Professional Engineer Telephone Numbers...
   Telephone: (**828**) **254** - **0015** ext. Fax: (**828**) **254** - **0501**
4. Professional Engineer E-mail Address: **fburbach@environcorp.com**
5. Professional Engineer Statement:

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

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

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

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

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

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

Signature 7-17-13
Date

(seal)

* Attach any exception to certification statement.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **42.2** lb/hr	4. Equivalent Allowable Emissions: **42.2** lb/hour **184.8** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit – Total Process Stack Limit of 42.2 lb/hr includes Feed Dryer, Reverb Furnace, Blast Furnace and Afterburner.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **202.24 lb/hr**	4. Equivalent Allowable Emissions: **202.24** lb/hour **885.8** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD Avoidance Limit - This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, Blast Furnace, and Refining Kettles.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **32.00** lb/hour **140.16** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.80 lb/ton of feed** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

NOx = 40 ton/hr x 0.80 lb/ton = 32.00 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

This accounts for the Reverb Furnace's contribution to the total NOx emissions form the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **42.2 lb/hr**	4. Equivalent Allowable Emissions: **42.2** lb/hour **184.8** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit – Total Process Stack Limit of 42.2 lb/hr includes Feed Dryer, Reverb Furnace, Blast Furnace, and Afterburner.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **202.24 lb/hr**	4. Equivalent Allowable Emissions: **202.24** lb/hour **885.8** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD Avoidance Limit - This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, Blast Furnace, and Refining Kettles.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **6.00** lb/hour **26.28** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.80 lb/ton** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

NOx = 7.5 ton/hr x 0.80 lb/ton = 6.00 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

This accounts for the Blast Furnace's contribution to the total NOx emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **42.2 lb/hr**	4. Equivalent Allowable Emissions: **42.2** lb/hour **184.8** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit – Total Process Stack Limit of 42.2 lb/hr includes Feed Dryer, Reverb Furnace, Blast Furnace, and Afterburner.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **202.24 lb/hr**	4. Equivalent Allowable Emissions: **202.24** lb/hour **885.8** tons/year
5. Method of Compliance: **Stack Testing**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD Avoidance Limit - This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, Blast Furnace, and Refining Kettles.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Response to Request for Additional Information
File Number: 0570057-030-AC (PSD-FL-404C)

The following information is being submitted in response to a request for additional information (RAI) from Florida Department of Environmental Protection (DEP) dated May 14, 2013. Also included is a response to a comment from the Hillsborough County Environmental Protection Commission (EPC) that was submitted to DEP on May 7, 2013, but was not included in the RAI from DEP. DEP and EPC's comments are reiterated in italics for the sake of convenience. Additional information is attached to supplement the responses, where needed.

Process Rate revisions for the Refining/Casting, Furnace, and Battery Breaking Processes

1. *In the Application narrative, Section 5, EFT is proposing to revise the hourly process rate for the refining and casting operations from 20 TPH to 66 TPH for the purposes of operating at maximum capacity during stack testing, and 1,584 TPD for the purposes of demonstrating continuous compliance with the lead production rate. Similarly, EFT is proposing to manually monitor the furnace process rates (material input and heat input rates) for the purposes of stack testing, and is also proposing new daily process rates in order to demonstrate continuous compliance with the furnace process rates. A limit of 960 TPD was proposed for the feed dryer and reverb furnace, and 180 TPD for the blast furnace.*

   Per Table 15.1 - Typical Composition of Components in Battery Paste from Valve-Regulated Lead-Acid Batteries © 2004 by Rand, Moseley, Garche, and Parker, the typical average battery paste composition by weight is 57.5% lead sulfate, 32.5% lead dioxide, 2.5% metallic lead, and 7.5% other. Therefore, the overall percentage of elemental lead in battery paste is approximately 70% by weight. Performing a material balance on the smelting processes shows that the annual smelting capacity at 8,760 hours per year is about 312,491 TPY of elemental lead based on the 40 TPH process rate for the reverberatory furnace and the 7.5 TPH process rate for the blast furnace. The hard and soft lead produced in the smelting processes is sent to the refining kettles for further purification and alloying.

   Pursuant to Rule 62-4.070(1), F.A.C., in order to properly limit the lead production rate from the refining operations, EFT should provide the minimum residence time for the refining kettles (on a ton basis) for soft lead, hard lead, and lead alloys, in order to determine the maximum hourly process rate for this operation. In regards to the furnace operation, EFT should explain the procedures for the proposed manual monitoring to determine the furnace and feed dryer process rates. [Rule 62-4.070 (Standards of Issuing or Denying Permits), Florida Administrative Code (F.A.C.)]

Response:

The smelting capacity of the plant cannot be determined based solely on the lead composition of the paste and the maximum short-term input rates to the furnaces. The feedstocks to the furnaces contain other materials, such as solid lead battery components, coke for use as fuel or reductant, and, in the case of the blast furnace, lead-bearing slag from the reverb furnace, cast iron, and fluxes. Also, the furnaces throughput rates will vary depending on several variables. They cannot be operated continuously at their maximum short-term rates nor can they be operated uninterrupted throughout the year. They are shutdown at scheduled intervals for routine maintenance and



Revised Dispersion Modeling Results for Nitrogen Dioxide at a Battery Recycling Facility

Prepared for:
EnviroFocus Technologies, LLC
Tampa, Florida

Prepared by:
ENVIRON (EC) Canada
Mississauga, ON

Date:
Revision 1, July 2013

Project Number:
07-15422D

ENVIRON

Report Version Control

Report Version	Report Date	Changes Noted
Parent Document	April 2013	—
Revision 1	July 2013	Process Stack emission rate changed from 38.4 lb/hr to 42.2 lb/hr

Contents

1 Introduction

EnviroFocus Technologies, LLC (EnviroFocus) currently owns and operates a lead-acid battery recycling facility located at 1901 N. 66th Street in Tampa (Hillsborough County), Florida. The facility was issued a PSD Permit for an expansion (No. PSD-FL-404) by the Florida Department of Environmental Protection (FDEP) on October 22, 2009.

EnviroFocus has been unable to meet the NO_X emission limit for one of the emission units originally permitted in the 2009 application, while one other emission unit has consistently operated at NO_X emission rate significantly below the permitted value. As a result, EnviroFocus is requesting a revision to NO_X emission limits on the two emission units.

The purpose of this report is to demonstrate that, with the proposed changes, EnviroFocus will continue to comply with the PSD increment and NAAQS limits for NO_2. For the purpose of this revision, the significance modeling and full impact analysis were repeated. The following sections describe the proposed change and summarize the air quality analysis.

2 Proposed Emission Rate Changes

EnviroFocus has proposed changes to the NOx emission limits for the Process stack and the Hygiene stack (E4 and E6, respectively), with all other stack parameters remaining unchanged. For clarity, the current and proposed limits are presented in the table below.

Proposed Emission Limits

Emission Unit	Currently Permitted Emission Limit lb/hr (g/s)	Proposed Emission Limit lb/hr (g/s)
Process Stack (E4)	29.1 (3.67)	42.2 (5.32)
Hygiene Stack (E6)	14.3 (1.80)	5.0 (0.63)

3 Air Quality Impact Analysis

The ambient air quality impact analysis for the facility was revised to include the new NOx emission rates associated with the proposed emission limits.

In general, the analysis followed the same methodology used in previous submissions, with the following exceptions:

- Modification of the Process and Hygiene stack emission rates;
- Updated meteorological data (2006 to 2010);
- Newest version of AERMOD – version 12345;
- Use of the Plume Volume Molar Reduction Method (PVMRM) non- default regulatory option in AERMOD (for 1 hour modeling only);
- Updated monitored background concentration data;
- Updated inventory of neighboring sources; and
- Included demonstration of the new 1-hour NAAQS standard for NO_2.

Below is a detailed explanation of the methodology used in this analysis and a presentation of the results. All Tables referenced in this section can be found in Appendix A. All Figures are provided in Appendix B.

3.1 Summary of Methodology

The analysis provided in previous application documents established that there were significant impacts resulting from the project for NO_2. As a result, this revision includes:

- A summary of updated regulatory guidance on modeling 1 hour NO_2 concentration;
- Dispersion modeling of facility emissions (with updated inputs) to establish the revised Significant Impact Area (SIA) for NO_2;
- Development of an updated inventory of neighboring sources;
- Development of hourly Ozone concentration data for use in the PVMRM algorithm;
- Demonstration of compliance with the applicable NAAQS through a full impact analysis. This analysis consists of estimating the ambient air quality impact resulting from the proposed project's maximum allowable emissions in conjunction with the allowable impacts of neighboring sources and with area sources contributing to the background concentration.
- Demonstration of compliance with the applicable PSD Increment Analysis. This analysis consists of estimating the ambient air quality impact resulting from the proposed

project's maximum increase in emissions in conjunction with the increase in allowable impacts of neighboring sources and with area sources contributing to the background concentration.

The revised analysis used the significant impact threshold and the ambient air quality standard outlined in the latest EPA guidance document on NO_2 NAAQS.

3.2 Regulatory Compliance

Regulatory limits are applicable to each analysis and are summarized in Table 3.1.

3.2.1 1-hour NO_2 NAAQS Standard

The 1-hour NAAQS standard for NO_2 was not in effect when the existing PSD permit was issued in 2009, but a demonstration of attainment of this standard is now included.

The Federal Register published a new NAAQS limit for NO_2 on February 9, 2010, "attained when the 3-year average of the annual 98th percentile of 1-hour daily maximum concentrations does not exceed 100 ppb"[1] (188 $\mu g/m^3$). A guidance document was issued by the USEPA Office of Air Quality Planning and Standards on June 29, 2010 which established the significant impact level (SIL) of 4ppb (7.5$\mu g/m^3$), and outlined the methodology for, and addressed issues with demonstrating this new standard. Though the standard indicates that the 3-year average of the annual 8th highest daily maximum 1-hour concentrations should be calculated, the guidance states that the 5-year average of that same quantity is appropriate for NWS data. The methodology outlined in the guidance document was used for this modeling.

Source emission rates are defined in terms of NO_X (i.e. NO, and NO_2), but limits are placed on NO_2 concentrations. Several options exist for estimating conversion of NO to NO_2, including the ambient ratio method (ARM), ozone-limiting method (OLM), and plume volume molar reduction (PVMRM). OLM and PVMRM are currently non-default regulatory options within the AERMOD algorithm, and require justification and approval for use by the Regional Office, as discussed in the June 29, 2010 EPA-issued guidance document.

The ARM applies a conservative retroactive factor (suggested to be 0.8[2]) on NOx modeling results assuming total conversion of NO to NO_2 through reaction with O_3. The OLM option assumes that NO to NO_2 conversion is proportional to the ambient ozone concentration and conversion is determined by comparison of maximum NOx concentration to ambient ozone[3]. If O_3 concentration is greater than maximum NOx concentration, total conversion is assumed;

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[1] Memorandum: Guidance concerning the implementation of the 1-hour NO_2 NAAQS for the Prevention of Significant Deterioration Program. USEPA. June 29, 2010.

[2] Memorandum: *Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO2* National Ambient Air Quality Standard. Mar 1, 2011

[3] The Plume Volume Molar Ratio Method for Determining NO2/NOx ratios in Modeling – Part I: Methodology. Hanrahan, P. Journal of the Air and Waste Management Association. 1999.

otherwise, formation of NO_2 is limited by ozone concentrations. The PVMRM option accounts for available ambient ozone for converting NO to NO_2, as well as plume size as it travels from the source to each receptor. The key difference between OLM and PVMRM is that PVMRM accounts for the molar ratio of O_3 in the plume relative to NOx moles, as opposed to the mass basis that OLM calculates on. In the March 1, 2011 EPA Additional Clarification, the EPA stressed that although PVMRM is not necessarily a superior method to OLM, for isolated elevated point sources, it does provide a more realistic assessment of NO-to-NO_2 conversion as it moves downwind. Thus, the PVMRM algorithm was selected for the 1-hour NO_2 NAAQS modeling at EnviroFocus.

Though PVMRM is a non-default regulatory option, the 2011 EPA guidance[2] confirms that OLM and PVMRM are considered Tier 3 options, and states "we recommend their use should be generally accepted provided some reasonable demonstration can be made of the appropriateness of the key inputs for these options, the in-stack NO_2/NO_X ratio and the background ozone concentrations". As a result, the in-stack ratio (ISR) and source of ozone data are thoroughly documented in Section 3.6.2.2.

3.2.2 Annual Mean NO_2 NAAQS Standard

The annual mean NAAQS standard for NO_2 of 53 ppb (100µg/m³) remains in effect, and demonstration of compliance is required.

3.2.3 PSD Increment NO_2 Standard

The PSD Increment annual mean standard for NO_2 of 25µg/m³ also remains in effect, and demonstration of compliance is required.

3.3 Dispersion Modeling

Following is a description of the modeling methodology used in this impact analysis. The methods explored are in general accordance with the protocol submitted to Florida DEP on May 14, 2008, and subsequent correspondence with Florida DEP, as modified in the following sections.

3.3.1 Model Selection

Dispersion modeling was used to predict the ambient air concentrations in the vicinity of the facility resulting from the project. The most recent version of the US EPA-preferred model AERMOD (Version 12345) was used. AERMOD is appropriate for use in estimating ground-level short-term ambient air concentrations resulting from non-reactive buoyant emissions from sources located in simple and complex terrain.

For modeling of 1-hour NO_2 concentrations, the model yields the 5-year average of the 98th percentile (8th highest) of the daily 1-hour maximum concentrations directly for comparison to

standards. For modeling of annual NO_2 concentrations, the model yields the peak annual average directly for comparison to standards.

3.3.2 Meteorological Data

AERMOD requires a meteorological input file to characterize the transport and dispersion of pollutants in the atmosphere. Updated surface and upper air meteorological data files for use in the model were provided by the Florida Department of Environmental Protection (FDEP)[4]. The files included the most recent five years of data (2006 to 2010) collected at Tampa Airport, Tampa, Florida. The data supplied had been fully preprocessed by FDEP with appropriate surface characteristics.

3.3.3 Land Use Classification

The land use had previously been analyzed and found to be rural in the original 2008 application for a PSD permit. The same classification was used in the current modeling.

3.3.4 Terrain Data

Terrain elevations are incorporated into the modeling using the most recent version of AERMAP (version 11103), AERMOD's terrain preprocessor. For this modeling exercise, terrain data is extracted from 7.5-minute Digital Elevation Model (DEM) files with a 30-meter grid spacing that were produced by the United States Geological Society (USGS). For the annual NAAQS and Increment modeling, a small section of the SW quadrant of the modeling domain was not covered by the 7.5-minute DEM files. This portion of the modeling domain was filled in with DEM 90-meter grid spacing terrain data. No sources were affected by this addition. The elevations for the buildings and EUs on the EnviroFocus property were previously refined for the 2008 application for a PSD permit according to height differences associated with building foundations. Thus, those same elevations were used in this modeling.

3.3.5 Modeled Sources at Facility

With the exception of the new emission rates for the Process and Hygiene stacks, all emission units at the facility were included in the modeling with the same source parameters and emission rates as previously submitted. The Process and Hygiene stacks were modeled with proposed emission rates as described in Section 2.

Figure 3.1 depicts the layout of the modeled sources. Point sources are used to represent sources with identifiable emission points that have either thermal buoyancy or momentum. Table 3.2 lists modeling parameters of all sources at the facility. Table 3.3 lists the emission rates for each of the NO_2 modeling scenarios.

[4] Email of August 8, 2012 from M. Lovin.

3.3.6 Building Downwash

Building downwash algorithms incorporated into the AERMOD model account for the effects of the aerodynamic wakes and eddies produced by plant buildings and structures on plume dispersion. Building downwash is the effect of nearby structures on the flow of emissions from their respective sources.

Figure 3.2 shows the locations of buildings at the facility. Downwash parameters were calculated using the BPIP program. Inputs and results can be found in the associated BPIP output file provided in Appendix C.

3.3.7 Receptor Grid

A nested Cartesian grid was used, with the following spacing:

- 200-meter spacing, extending from the fenceline to 2 km from the facility
- 500-meter spacing, extending from 2 km to 12.3 km from the facility

The above grid was used for all NAAQS and Increment modeling. In addition to the Cartesian receptor grids, the modeling included discrete receptor points, spaced every 50 meters, along the facility fenceline.

3.3.8 Significant Impact Area

The Significant Impact Area (SIA) is a circle centered on the facility, with radius extending to the furthest point at which the facility's proposed emissions would be significant. For 1-hour analysis, significant is defined by a 5-year average of the peak 1-hour NO_2 average concentration exceeding the SIL of 7.5 $\mu g/m^3$. For annual analysis, significant is defined by a peak annual NO_2 average exceeding the SIL of 1.0 $\mu g/m^3$. For a pollutant with two averaging periods, the averaging period with the greatest radius sets the size of the area of significant impact for all averaging periods in the full impact analysis.

All emissions from the facility were modeled with five years of meteorological data, and resulting concentrations (at the appropriate averaging period) were compared to the significance thresholds for each averaging period given in Table 3.4. The distance from the facility to the furthest point where a significance threshold was exceeded determined the radius of the pollutant's significant impact. This area was then used as the receptor coverage area in the subsequent full impact analysis. The radius of the SIA for each averaging period is also given in Table 3.4.

The 1-hour NO_2 and annual significant impacts extended up to 13.4 and 2.7 kilometers away from the facility, respectively, and are shown in Figures 3.3 and 3.4. Therefore, the radius of the SIA is 13.4 km (resulting from the 1-hour modeling).

3.4 Monitored Background Concentrations

FDEP provided ENVIRON with a summary of the most recent 3 years (2010 to 2012) of NO_2 measurements at 2 monitoring locations in Hillsborough and Pinellas County[5]. Data from the closest of these stations (USMC Reserve Center – Gandy Blvd, AQS Monitor ID: 12-057-1065-42602-1) was used to represent the monitored background concentration for the project and is summarized in Table 3.5.

For the hourly analysis, the background concentration was found to be 33 ppb (62 $\mu g/m^3$), based on the 3-year average of the 98th percentile of daily maximum hourly concentrations.

For the annual analysis, the background concentration was found to be 5.1ppb (9.6 $\mu g/m^3$), based on the 3-year average of the annual concentrations.

3.5 Inventory of Neighboring Sources

3.5.1 Inventory for 1-hour NO_2 NAAQS Modeling

"Neighboring" sources in the vicinity of the proposed source, as defined under the PSD program, include any nearby sources within the area of significant impact and any sources outside this area but within 50 kilometers of the area which could have a significant impact on receptors within the Significant Impact Area (SIA). FDEP provided ENVIRON with an inventory of NOx emitting sources, extending beyond 50km from the SIA[6].

3.5.1.1 Removing Insignificant Sources (1-hour analysis)

Insignificant sources were removed from this inventory by:

1. Omitting any emission unit (EU) more than 10km away from the project location, as suggested in the March 1, 2011 EPA Guidance document. This is a deviation from routine inclusion of sources within 50km of the project location. However, as stated in the guidance, an inclusion area of 50km would be overly conservative for 1-hour NO_2 analysis.
2. Omitting any EU or source designated as "Inactive".
3. Omission of any emission units designated as "emergency" (e.g. generators, water pumps, etc.), given that these units typically will not be in operation. The 2011 EPA guidance indicated that the 1-hour analysis should include "those emissions that are continuous enough or frequent enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations".

Table 3.6 summarizes the results of the screening of neighboring facilities for the 1-hour NOx inventory.

[5] Email of January 14, 2013 from M. Lovin
[6] Email of January 14, 2013 from M. Lovin

3.5.1.2 Filling Missing Data

FDEP indicated that the inventory provided had not been subjected to any quality assurance (QA) checks or procedures. In many cases the data (e.g. emission rates, discharge parameters) for each EU was not complete, and in some cases the records for EUs were duplicated. ENVIRON refined the inventory conservatively as described below.

Duplicate records for EUs were removed from the inventory. Where the records did not have identical emission rates, the record with the highest emission rate was retained.

The data from FDEP included fields for potential, allowable and actual emission rates (in lb/h or tpy), but few records included all of these values. Where available, the allowable emission rate was retained in the refined inventory. Where the allowable emission data was missing, potential emission rates were used. If neither allowable nor potential emission rates were given, the actual emission rate was used. Table 3.6 includes the emission rates resulting from this process for 1-hour NO_2 modeling.

Where source parameters (e.g. stack height, diameter, flow rate, etc.) were missing, assumptions were made to fill in the missing data following consistent rules. If any of these sources appeared to result in violations after the implementation of these conservative assumptions, the assumptions were then further investigated and refined. The rules for filling in this information are as follow:

1. If the EU description suggests that it is likely a point source, and if:
   a) No stack parameters other than the flow rate (in ACFM) are given, apply the conservative parameters from another similar EU present at that facility (e.g. shortest height, lowest temperature). If flow rate only exists in DSCFM, use this as a conservative value for flow rate. If no flow rate is given, apply the lowest flow rate from another EU at that facility;
   b) No stack parameters are given and the EU is the sole EU for that facility, apply the conservative parameters of stack height = 5m, and exit velocity = 5 m/s. If the EU is described as a combustion source, set stack temperature = 500°F; otherwise stack temperature = ambient temperature.
2. If the EU has no stack parameters, and the inventory indicates that it is likely a fugitive emission, apply the conservative volume source parameters of side length = 10m, a release height = 5m, and the emission rate of the source in question
3. If the EU is beyond 1km outside the SIA, and if the release type is unclear, treat it as a fugitive emission with the parameters outlined in item 2 above.

Figure 3.5 depicts the facilities considered for inclusion in the NAAQS modeling inventory for 1-hour NO_2 NAAQS modeling. The emission sources, their locations and stack parameters are summarized for these in Tables 3.7.

3.5.1.3 Refinement of Neighboring Sources

Initial model runs indicated that a number of the neighboring EUs were problematic, and all were described as diesel engines (e.g. generators, water pumps, crushers, etc.), though they were not described as "emergency". On closer inspection, the exhaust parameters listed for these EUs were found to be unrealistic for diesel engine exhaust (e.g. ambient temperature, low velocity). In some cases the parameters were realistic for a single unit, but the description made it clear it was multiple units (e.g. five 400 hp diesel generators). Therefore, the exhaust parameters for these units were adjusted as follows:

- Exhaust temperature: if missing or less than 750°F, set to 750°F;
- Exhaust volume flow:
  - If engine size given, estimate flow from engine power and factor of 250cfm / 100hp (factor based on survey of manufacturer data);
  - If no engine size was given, estimate flow from emission rate and concentration of 1.1 g/m³ (concentration based on Tier 1 limit of 6.9 g/hp-h, and ratio of 250cfm/100hp);
- Velocity: if missing or less than 45 m/s, set to 50 m/s;
- Diameter: calculate from velocity and flow rate given above.

The above adjustments ensure that the engine exhausts have reasonable concentration, momentum, and thermal buoyancy. Please note that the emission rates were not adjusted in any way.

3.5.2 Inventory for NO_2 Annual NAAQS Modeling

The neighboring source inventory for annual NO_2 NAAQS modeling was developed from the inventory of NO_X emitting sources provided by the FDEP. The "allowable" emission rates were used where available.

3.5.2.1 Removing Insignificant Sources

Insignificant sources were removed from this inventory by:

1. Omitting any EU or source designated as "Inactive";
2. Omitting any emission unit (EU) more than 50km away from the SIA;
3. Applying the North Carolina "20D" rule to determine the significance of each offsite NOx source. This rule indicates that any offsite source within the SIA having nonzero total annual emissions (in tpy) must be included in the modeling. In addition, any offsite source whose long-term emissions (in tpy) are at least 20 times greater than the distance to the SIA must be included.

Table 3.6 summarizes the results of the 20-D screening of neighboring facilities for the annual NAAQS modeling.

3.5.2.2 Filling Missing Data

The same procedure was used to fill in missing data for annual modeling source parameters as in the 1-hour NAAQS modeling. Figure 3.6 presents the facilities included in the modeling inventory for Annual NAAQS. The screening is shown in Table 3.6; the emission sources, their locations and stack parameters are summarized in Tables 3.8.

3.5.3 Inventory for NO_2 Increment Modeling

The neighboring source inventory for NO_2 Increment modeling was developed from the inventory of NO_X emitting sources provided by the FDEP. The "actual" emission rates were used where available. "Inactive" sources were included with negative "actual" emission rates to account for decommissioned pre-baseline sources within the model. Insignificant sources were removed and missing data was filled following the procedures outlined above for the annual NAAQS modeling.

3.5.3.1 Filling Missing Data

The same procedure was used to fill in missing data for Increment modeling source parameters as in the 1-hour NAAQS modeling. Figure 3.7 presents the facilities included in the modeling inventory for annual Increment NAAQS. The screening is shown in Table 3.9; the emission sources, their locations and stack parameters are summarized in Tables 3.10.

3.6 Model Control Options

3.6.1 Annual NO_2 NAAQS and Increment Modeling

For the Annual NAAQS and Increment air quality analysis, the AERMOD model was used with default regulatory options.

3.6.2 1-hour NO_2 NAAQS Modeling

For the hourly analysis, the AERMOD model was used with:

- The PVMRM non-default regulatory option for conversion of NO to NO_2;
- Pollutant ID of NO_2, and averaging time of 1-hour to enable optional outputs for 1-hour NAAQS analysis; and
- The MAXDCONT output file option for evaluation of contributions to NAAQS violations

Though PVMRM is a non-default regulatory option, the 2011 EPA guidance[2] confirms that OLM and PVMRM are considered Tier 3 options, and states "we recommend their use should be generally accepted provided some reasonable demonstration can be made of the appropriateness of the key inputs for these options, the in-stack NO_2/NO_X ratio and the background ozone concentrations". The rationale for the "key inputs" used for this study is given in the following paragraphs.

3.6.2.1 In-stack NO_2/NO_X ratio

The 2011 EPA guidance recommends use of 0.50 as the default in-stack ratio (ISR) of NO_2/NO_X for input to the PVMRM algorithm, in the absence of more appropriate source-specific information on in-stack ratios. This EPA recommended default value was used for all EUs at the Envirofocus facility, and all neighboring sources, with the exception of one neighboring EU: (Facility ID 7771101, Woodruff & Sons Inc.).

The Woodruff & Sons EU is a 525 hp diesel engine power unit for a crusher, located about 2.2 km from EnviroFocus. For this unit only, a slightly less conservative ISR of 0.4 was used. While it is recognized that the ISR for diesel engines is typically much lower, for the purpose of demonstrating that an ISR of 0.4 is a conservative source-specific value, and that the EU is modeled conservatively, we note:

a) Some jurisdictions have specified the use of a lower NO_2/NO_X ISR for modeling. For example, Texas Commission on Environmental Quality (TCEQ), Chapter 106, Subchapter W, Rule 106.512 requires that an ISR ranging from 0.2 to 0.4 (dependent on emission factor) be used to demonstrate the NO_2 NAAQS for stationary engines, including compression ignition stationary engines.

b) The EPA established a database of NO_2/NO_X ISR[7]. For diesel engines between 300 and 1,000 hp, the maximum ISR in the database is 0.32, and the average ISR is 0.1.

c) The EU operates intermittently over the year, but has been modeled as operating continuously 24/7 through the five year modeling period.

3.6.2.2 Hourly Ozone Concentrations

The PVMRM algorithm requires hourly ozone concentration data as an input. The data must be representative of the ambient ozone concentration within the modeling domain, and must include data for every hour of processed meteorological data. This allows the algorithm to calculate the temporal molar conversion of NO to NO_2 within the plume.

Ozone data was obtained from the USEPA AQS database for 2006-2010 from the closest ozone monitoring station (Davis Island – monitor ID: 12-057-1035), which is located 9 km from the facility, and within the modeling domain. Missing data in the Davis Island record was filled following a fixed methodology. The general premise of the method was to use linear interpolation to calculate the missing value based on the values adjacent to the missing hour. For example, if only one hour is missing, then the average of the hour prior to and following the missing hour is substituted for the missing hour.

The linear interpolation method was used for up to 3 consecutive missing hours, beyond which an alternative monitor located 17km from the facility (Gandy Blvd – monitor ID: 12-057-1065)

[7] http://www.epa.gov/scram001/no2_isr_database.htm

was used to fill in the missing data. The ozone data from the Davis Island monitor was 91% complete prior to any modifications. The filled-in Davis Island monitor data when combined with the Gandy Blvd monitor data was 99% complete, after which the same rules of linear interpolation were applied to obtain 100% complete data.

3.7 Full Impact Analysis

A full impact analysis demonstrates the impacts of EnviroFocus emissions, in conjunction with significant neighboring sources and monitored background concentrations.

3.7.1 Results: 1-hour NAAQS

The AERMOD dispersion model was used with emissions from EnviroFocus and all significant neighboring sources to estimate ambient air concentration within the SIA. The full 5 year period was modeled, and the model yielded the 5-year average of the 98th percentile of the daily maximum 1-hour concentrations. Results are given in Table 3-11a. Background concentrations were added to model predictions for comparison to the NAAQS, as presented in the table. The table demonstrates that the 1-hour NAAQS limit of 188µg/m^3 was exceeded within the circular SIA. Figure 3.8 presents the model results graphically, and suggests that high concentrations are mainly due to neighboring sources.

The MAXDCONT algorithm was used to investigate the contribution of EnviroFocus to the overall model exceedances, when paired in space and time. To facilitate this investigation, all emissions from the EnviroFocus facility were included in a single source group within the model. The MAXDCONT option produces a file that includes the contribution of each source group to predicted concentrations above a specified threshold, which in this case was set to the NAAQS limit less the monitored background concentration. The resulting file indicated that, at any combination of time and location where a violation was predicted, EnviroFocus did not contribute significantly. That is, according to the MAXDCONT output, EnviroFocus' contribution was less than the SIL of 7.5 µg/m^3 at any of the time/location combinations where violations occurred. All modeling files and this analysis are submitted with this report in electronic format.

As a result, we conclude that EnviroFocus did not contribute significantly to a predicted violation of the 1-hour NAAQS for NO_2.

3.7.2 Results: Annual NAAQS and Increment

For modeling of Annual and Increment NO_2, each year from 2006 to 2010 was modeled individually to establish annual averages for each year. The resulting peak Annual NAAQS and Increment concentrations within the modeling domain for each year are given in Tables 3-11b and 3-11c, respectively. Background concentrations were added to model predictions for comparison only to the annual AAQS, as presented in the table.

There were apparent violations of the annual NAAQS within the modeling domain. Figure 3.9 shows the area where violations of the annual NAAQS are predicted and Figure 3.4 shows the

very limited area where emissions from EnviroFocus exceed the annual SIL of 1.0 $\mu g/m^3$. Comparison of these two areas makes it apparent that the contribution of EnviroFocus is less than the SIL at any location where a violation is predicted. Table 3.11b also gives maximum modeled concentrations at any location where EnviroFocus impact exceeds the SIL, and demonstrates that the limit is not exceeded at these locations.

As a result, we conclude that EnviroFocus did not contribute significantly to a predicted violation of the annual NAAQS for NO_2.

Table 3-12c indicates that there were no exceedances of the increment for NO_2. These results are presented graphically in Figure 3.10.

Appendix A:
Tables

Table 3.1
Summary of Concentration Limits
EnviroFocus Technologies, LLC
Tampa, Florida

Requirement	Averaging Period	Applicable Limit	
		(ppb)	($\mu g/m^3$)
NO_2 NAAQS	Annual	53	100
	1-hour[1]	100	188
Increment	Annual	13	25

Notes:
[1] 3-year average of the 98th percentile (8th highest) of the daily 1-hour maximum concentrations

Table 3.2
EnviroFocus Facility Source Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Source ID	Source	Coordinates		Exit Flowrate		Diameter		Exit Velocity	Temperature		Stack Height		NO_2/NOx In-stack Ratio[4]
		UTMx (m)	UTMy (m)	(ft^3/min)	(m^3/sec)	(in)	(m)	(m/sec)	(F)	(K)	(ft)	(m)	
E1	Refinery Combustion Stack C[2]	364,053	3,093,769	2000	0.94	24	0.61	3.2	450	505	55	16.7	0.5
E2	Refinery Combustion Stack B[2]	364,058	3,093,753	2000	0.94	24	0.61	3.2	450	505	54	16.5	0.5
E3	Refinery Combustion Stack A[2]	364,081	3,093,769	1000	0.47	17	0.43	3.2	450	505	89	27.2	0.5
E4	Combined Stack of Feed Dryer, Reverb Furnace and Blast Furnace	364,057	3,093,807	58886	27.8	60	1.52	15.2	150	339	130	39.6	0.5
E6	Hygiene Baghouse and Stack	364,092	3,093,823	72000	34.0	60	1.52	18.6	150	339	130	39.6	0.5
E11	Soda Ash Slurry Exhaust	364,184	3,093,740	800	0.38	8	0.20	11.6	300	422	20	6.2	0.5
E12	Generator Exhaust	364,179	3,093,737	3845	1.8	8	0.20	56.0	941	778	11	3.4	0.5
EXISTING[3]	Emission units removed post-baseline	364,040	3,093,779	17905	8.5	26	0.66	24.7	98	310	60	18.4	N/A

Notes:

[2] Stack A represented two co-located stacks with flowrate and stack area equivalent of two stacks. Stacks B and C each represented four co-located stacks with flowrate and stack area equivalent of four stacks.

[3] Only included in Annual Average Increment Modeling

[4] Used only for the 1-hour Average NO_2 modeling

Table 3.3
EnviroFocus Facility Emission Rates
EnviroFocus Technologies, LLC
Tampa, Florida

Source ID	Coordinates		NO_X Emission Rate		
	UTM_x (meters)	UTM_y (meters)	1-hour Average (g/s)	Annual Average (g/s)	Annual Average Increment (g/s)
E1	364,053	3,093,769	1.01E-01	1.01E-01	1.01E-01
E2	364,058	3,093,753	1.01E-01	1.01E-01	1.01E-01
E3	364,081	3,093,769	5.04E-02	5.04E-02	5.04E-02
E4	364,057	3,093,807	5.32E+00	5.32E+00	5.32E+00
E6	364,092	3,093,823	6.30E-01	6.30E-01	6.30E-01
E11	364,184	3,093,740	6.30E-03	6.30E-03	6.30E-03
E12	364,179	3,093,737	6.93E-02	6.93E-02	6.93E-02
EXISTING	364,040	3,093,779	N/A	N/A	-9.19E-01

Table 3.4
Significant Impact Thresholds and Results of Significant Impact Modeling
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	Significance Threshold (µg/m³)	Radius of Significant Impact (km)
NO_2	Annual	1[1]	2.7
	1-hour	7.5[2]	13.4

Notes:

[1] Significance threshold from FDEP Rule 62-210.200(275), http://www.dep.state.fl.us/legal/Rules/air/62-210/62-210.pdf.

[2] Significance threshold from EPA June 29, 2010 Guidance document. (5-year average of the 1st Highest daily 1-hour maximum concentration)

Table 3.5
Summary of Monitored Background Concentrations
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Monitored Background Concentration (ppb)	Monitored Background Concentration ($\mu g/m^3$)	Monitor ID	Averaging Period
NO_2	33	62	12-057-1065-42602-1	1-hour[1]
	5.1	9.6	12-057-1065-42602-1	Annual[2]

Notes:

[1] 3-year (2010-2012) average of the 98th percentile of daily 1-hour maximum monitored concentrations

[2] 3-year (2010-2012) average of the annual average monitored concentrations

Table 3.6
Screening of Neighboring Facilities for 1-hour and Annual NAAQS Modeling
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT Center D_1 (km)	Distance from EFT SIA D_2 km	Total Shortterm NO_2 Emissions (tpy)	Total Longterm NO_2 Emissions (tpy)	1-hour Screening: Within 10 km of EFT (D_1<10)?	Annual Screening: Within 50 km of SIA and Longterm Emissions over $20D_2$?
490015	HARDEE POWER PARTNERS LIMITED[2,1]	54.7	42.4	5778.5	5116.2	NO	YES
490043	VANDOLAH POWER COMPANY, LLC	66.5	54.2	7277.5	2016.0	NO	NO
490340	SEMINOLE ELECTRIC COOPERATIVE, INC.[2,1]	54.5	42.2	5189.5	1289.0	NO	YES
490343	OLDCASTLE LAWN AND GARDEN INC	55.2	42.9	37.1	37.1	NO	NO
490344	MCBAR5, LLC	81.4	69.1	20.6	20.6	NO	NO
530010	CEMEX CONSTRUCTION MTLS FLORIDA, LLC	76.0	63.7	4345.0	4305.6	NO	NO
530017	ER JAHNA INDUSTRIES INC	66.0	53.7	3.8	3.8	NO	NO
530021	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	68.3	56.0	9048.7	11382.6	NO	NO
530031	TURNER FUNERAL HOMES INC	58.2	45.9	0.1	0.1	NO	NO
530039	FAMILY OWNED SERVICES CORP	64.1	51.8	0.0	0.0	NO	NO
530044	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	70.0	57.7	23.5	23.5	NO	NO
530050	FLORIDA ROCK INDUSTRIES, INC.	76.1	63.8	31.4	23.5	NO	NO
530357	D.A.B. CONSTRUCTORS INC	57.8	45.5	17.6	17.6	NO	NO
530365	HERNANDO COUNTY ANIMAL SERVICES	62.3	50.0	3.8	3.8	NO	NO
530372	HERNANDO CREMATORY INC	59.5	47.2	1.2	1.2	NO	NO
530379	HERNANDO COUNTY BOCC	79.4	67.1	40.1	40.1	NO	NO
570001	JOHNSON CONTROLS BATTERY GROUP, INC	9.7	-2.6	3.3	3.3	YES	YES
570003	CF INDUSTRIES, INC.	6.9	-5.4	14.5	14.5	YES	YES
570005	CF INDUSTRIES, INC., PLANT CITY PHOS	32.6	20.3	362.1	362.4	NO	NO
570008	MOSAIC FERTILIZER, LLC[1]	11.4	-0.9	534.1	533.6	NO	YES
570016	CITGO PETROLEUM CORPORATION	7.4	-4.9	19.7	19.7	YES	YES
570018	VULCAN MATERIALS CO / FLORIDA ROCK DIV.	7.0	-5.3	0.0	0.0	NO	NO
[illegible]0021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	6.2	-6.1	89.0	89.0	YES	YES
[illegible]0024	KINDER MORGAN OLP "C"[3]	6.8	-5.5	151.5	151.5	YES	YES
570025	TRADEMARK NITROGEN CORP	3.4	-8.9	75.1	75.1	YES	YES
570028	NEW NGC, INC.	18.9	6.6	169.9	185.3	NO	YES
570039	TAMPA ELECTRIC COMPANY (TEC)[2,1]	18.9	6.6	50586.6	50061.2	NO	YES
570040	TAMPA ELECTRIC COMPANY[2]	7.9	-4.4	1898.7	1157.2	YES	YES
570041	FLORIDA HEALTH SCIENCES CTR, INC	8.2	-4.1	16.0	16.0	YES	YES
570055	CHEVRON U.S.A. INC.	19.5	7.2	5.8	5.8	NO	NO
570056	BUILDING MATERIALS MANUFACTURING CORP	6.9	-5.4	8.1	8.1	YES	YES
570061	TAMPA ARMATURE WORKS	2.5	-9.8	1.4	1.4	YES	YES
570065	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	16.8	4.5	0.0	0.0	NO	NO
570069	INDUSTRIAL GALVANIZERS AMERICA, INC.	4.1	-8.2	0.0	0.0	NO	NO
570080	MARATHON PETROLEUM COMPANY LP	5.1	-7.2	9.2	9.2	YES	YES
570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	7.7	-4.6	2.5	2.5	YES	YES
570082	GULF SULPHUR SERVICES LTD., LLP	7.2	-5.1	0.0	0.0	NO	NO
570085	CENTRAL FLORIDA PIPELINE	7.8	-4.5	30.9	30.9	YES	YES
570087	CORESLAB STRUCTURES (TAMPA) INC	4.9	-7.4	0.0	0.0	NO	NO
570088	HALEY, JAMES A. VETERAN'S HOSPITAL TAMPA	11.3	-1.0	0.0	0.0	NO	NO
570089	ST. JOSEPH'S HOSPITAL[1]	11.1	-1.2	110.5	109.1	NO	YES
570090	MASTER - HALCO, INC.	4.1	-8.2	7.0	7.0	YES	YES
570092	KINDER MORGAN PORT SUTTON TERMINAL, LLC[3]	7.0	-5.3	0.1	0.1	YES	YES
570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	4.8	-7.5	8.0	6.6	YES	YES
570100	GULF SULPHUR SERVICES LTD., LLP	7.5	-4.8	0.0	0.0	NO	NO
570119	TRADEMARK METALS RECYCLING, LLC	0.6	-11.7	7.9	6.7	YES	YES
570123	HESS CORPORATION	22.0	9.7	5.2	5.2	NO	NO
570127	CITY OF TAMPA	4.2	-8.1	703.0	679.0	YES	YES
570141	US AIR FORCE (MACDILL AFB)	16.3	4.0	70.7	70.7	NO	NO
570160	BALL METAL BEVERAGE CONTAINER CORP.	9.7	-2.6	24.7	24.7	YES	YES
570163	GRIFFIN INDUSTRIES	2.6	-9.7	0.0	0.0	NO	NO
570197	MOTIVA ENTERPRISES LLC	20.2	7.9	0.0	0.0	NO	NO
570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	4.3	-8.0	53.5	53.5	YES	YES
[illegible]0224	HARSCO MINERALS	8.5	-3.8	18.0	18.0	YES	YES
[illegible]0252	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	8.7	-3.6	8.6	8.6	YES	YES
570254	VERTIS, INC.	15.7	3.4	7.8	4.5	NO	NO
570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.[2]	4.2	-8.1	1.4	1.4	YES	YES

Facility ID	Company Name	Distance from EFT Center D_1 (km)	Distance from EFT SIA D_2 km	Total Shortterm NO_2 Emissions (tpy)	Total Longterm NO_2 Emissions (tpy)	1-hour Screening: Within 10 km of EFT (D_1<10)?	Annual Screening: Within 50 km of SIA and Longterm Emissions over $20D_2$?
570286	TAMPA SHIP, LLC	7.8	-4.5	188.0	188.0	YES	YES
570293	STAR PACKAGING CORPORATION	17.8	5.5	0.2	0.2	NO	NO
570296	FCC ENVIRONMENTAL, LLC	25.2	12.9	21.6	21.6	NO	NO
570320	DART CONTAINER CORPORATION OF FLORIDA	21.2	8.9	32.4	32.4	NO	NO
570342	ZIPPERER'S AGAPE MORTUARY & CREMATORY IN	29.1	16.8	0.0	0.0	NO	NO
570370	PARADISE, INC.	24.9	12.6	5.6	5.6	NO	NO
570373	CITY OF TAMPA-WASTEWATER DEPT.	4.3	-8.0	184.5	152.8	YES	YES
570415	NEBRASKA PRINTING COMPANY INC.	13.5	1.2	0.0	0.0	NO	NO
570425	MANHEIM TAMPA DBA GREATR TB AUTO AUCTION	9.8	-2.5	0.0	0.0	NO	NO
570431	FLORIDA MORTUARY	7.4	-4.9	0.0	0.0	NO	NO
570437	NEWSPAPER PRINTING COMPANY, INC.	16.4	4.1	0.6	0.6	NO	NO
570438	FLORIDA GAS TRANSMISSION COMPANY	30.6	18.3	44.6	44.6	NO	NO
570442	GULF MARINE REPAIR/HENDRY CORPORATIONS	4.3	-8.0	142.9	142.9	YES	YES
570455	PASCO TERMINALS, INC.	8.4	-3.9	0.0	0.0	NO	NO
570460	JAMES HARDIE BUILDING PRODUCTS, INC.	23.3	11.0	62.4	62.3	NO	NO
570461	BLACKLIDGE EMULSIONS INCORPORATED	4.7	-7.6	10.5	10.5	YES	YES
570474	T-R DRUM & FREIGHT CO.	31.8	19.5	3.4	3.4	NO	NO
570480	UNIVERSITY OF SOUTH FLORIDA (USF)[1]	11.5	-0.8	16.9	16.9	NO	YES
570854	HILLSBOROUGH COUNTY SOLID WASTE MGT DEPT	28.6	16.3	50.2	50.2	NO	NO
571029	INTERNATIONAL PAPER COMPANY	27.2	14.9	9.0	9.0	NO	NO
571151	INTERNATIONAL PAPER COMPANY	4.7	-7.6	10.2	10.2	YES	YES
571185	CARGILL, INC.	17.9	5.6	11.0	11.0	NO	NO
571205	STOROPACK, INC.	1.0	-11.3	0.0	0.0	NO	NO
571209	THE LANE CONSTRUCTION COMPANY	7.1	-5.2	24.1	24.1	YES	YES
571217	SEA 3 OF FLORIDA, INC.	7.8	-4.5	34.5	34.5	YES	YES
571240	CARGILL INC.- SALT DIVISION	5.6	-6.7	0.7	0.7	YES	YES
571242	NEW NGC, INC., D/B/A NATIONAL GYPSUM COM	18.2	5.9	96.3	96.3	NO	NO
571268	QWEST COMMUNICATIONS COMPANY LLC	3.6	-8.7	0.0	0.0	NO	NO
[illegible]269	H. LEE MOFFITT CANCER CENTER[1]	11.9	-0.4	41.0	41.0	NO	YES
571279	FLORIDA GAS TRANSMISSION COMPANY[1]	11.8	-0.5	50.0	49.9	NO	YES
571290	TITAN AMERICA, LLC	7.3	-5.0	215.3	215.3	YES	YES
571301	L.V. THOMPSON, INC. (TAMCO)	3.0	-9.3	8.3	8.3	YES	YES
571320	HILLSBOROUGH CO. WATER RESOURCE SERVICES	25.2	12.9	18.5	18.5	NO	NO
571323	FARKAS LAND CLEARING & DEVELOPMENT	20.5	8.2	66.5	66.5	NO	NO
571326	SEPARATION TECHNOLOGIES, LLC	18.9	6.6	51.8	51.8	NO	NO
571328	ORION MARINE CONSTRUCTION, INC.	18.3	6.0	0.4	0.4	NO	NO
571337	TAMPA PAVEMENT CONSTRUCTORS, INC., A SUB	3.9	-8.4	28.0	28.0	YES	YES
571339	TRINITY MATERIALS, LLC	7.2	-5.1	115.4	115.4	YES	YES
571342	BLACKLIDGE EMULSIONS, INC.	6.4	-5.9	1.2	1.2	YES	YES
571402	ANCHOR SANDBLASTING AND PAINTING, INC	5.3	-7.0	30.9	30.9	YES	YES
571408	CHROMALLOY CASTINGS, TAMPA CORP	16.4	4.1	11.9	11.9	NO	NO
571417	RIVERHAWK MARINE, LLC	17.3	5.0	0.0	0.0	NO	NO
571421	NEXLUBE TAMPA, LLC	7.1	-5.2	74.9	74.9	YES	YES
571427	G&K SERVICES	16.4	4.1	3.5	3.5	NO	NO
571428	TLC PROPERTY MAINTENANCE, INC	30.7	18.4	12.4	12.4	NO	NO
810001	TRANSMONTAIGNE PRODUCT SERVICES, INC.	39.5	27.2	42.1	42.1	NO	NO
810007	TROPICANA MANUFACTURING COMPANY, INC.	55.2	42.9	521.2	572.9	NO	NO
810010	FLORIDA POWER & LIGHT (PMT)[2,1]	39.7	27.4	24419.3	23147.3	NO	YES
810024	FLORIDA POWER & LIGHT COMPANY	40.2	27.9	17.1	17.2	NO	NO
810030	EATON AEROSPACE LLC	62.3	50.0	0.3	0.0	NO	NO
810031	PIERCE MANUFACTURING	57.1	44.8	30.2	30.2	NO	NO
810045	MANATEE CO BOARD OF CO COMMISSIONERS	50.5	38.2	2.9	3.0	NO	NO
810055	MANATEE COUNTY UTILITY OPERATIONS DEPT.	55.2	42.9	58.8	59.0	NO	NO
810063	AJAX PAVING INDUSTRIES, INC.	40.6	28.3	73.7	13.8	NO	NO
810085	BELSPUR OAKS PET CREMATORY INC	60.3	48.0	0.2	0.1	NO	NO
810087	SERVICE CORPORATION INTERNATIONAL	59.4	47.1	4.6	4.5	NO	NO
810090	STRATEGIC MATERIALS, INC.	61.4	49.1	0.0	0.0	NO	NO
810164	FLOWERS BAKING COMPANY OF BRADENTON, LLC	61.0	48.7	5.3	5.3	NO	NO
810174	ROCKTENN CP, LLC	55.7	43.4	2.4	2.4	NO	NO
[illegible]193	BRASOTA SERVICES INC	63.5	51.2	1.3	1.3	NO	NO
810200	BROWN & SONS FUNERAL HOMES	56.4	44.1	1.2	1.2	NO	NO
810201	SUPERIOR ASPHALT, INC.	58.4	46.1	15.0	15.0	NO	NO
810215	GULFSTREAM NATURAL GAS SYSTEM, L.L.C.	39.9	27.6	118.7	119.6	NO	NO

Facility ID	Company Name	Distance from EFT Center D_1 (km)	Distance from EFT SIA D_2 km	Total Shortterm NO_2 Emissions (tpy)	Total Longterm NO_2 Emissions (tpy)	1-hour Screening: Within 10 km of EFT (D_1<10)?	Annual Screening: Within 50 km of SIA and Longterm Emissions over $20D_2$?
810230	CDM, LLC	48.6	36.3	0.0	0.0	NO	NO
810232	RATIONAL ENERGIES MC INC.	61.6	49.3	7.3	7.3	NO	NO
810233	VECENERGY	41.0	28.7	26.9	26.9	NO	NO
1010002	VITALITY FOODSERVICE INC	49.5	37.2	1.2	1.2	NO	NO
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY FL[1]	47.0	34.7	1088.8	1088.8	NO	YES
1010027	AJAX PAVING INDUSTRIES, INC.	34.8	22.5	11.1	11.1	NO	NO
1010028	OVERSTREET PAVING CO	50.6	38.3	126.4	45.1	NO	NO
1010041	APAC- SOUTHEAST, INC., CENTRAL FL. DIV	34.8	22.5	1.7	1.7	NO	NO
1010042	SCI FUNERAL SERVICES OF FLORIDA INC	51.7	39.4	5.2	8.8	NO	NO
1010045	HODGES FAMILY FUNERAL HOME INC	44.5	32.2	4.4	4.4	NO	NO
1010056	PASCO COUNTY[2,1]	48.4	36.1	1007.4	1006.7	NO	YES
1010071	PASCO COGEN LIMITED[2]	49.5	37.2	631.4	422.4	NO	NO
1010344	J.E. AUSLEY CONSTRUCTION INC	52.4	40.1	6.3	6.3	NO	NO
1010349	DOBIES FUNERAL HOME INC	51.3	39.0	0.0	0.0	NO	NO
1010360	KADUK FUNERAL SERVICES INC	42.4	30.1	0.0	0.0	NO	NO
1010365	TRINITY MEMORIAL CEMETARY INC	34.5	22.2	0.0	0.0	NO	NO
1010373	SHADY HILLS POWER COMPANY, L.L.C.[2,1]	48.0	35.7	7450.9	1224.2	NO	YES
1010377	FOSTER'S PET CREMATION SERVICE	55.1	42.8	0.0	0.0	NO	NO
1010378	PAW MATERIALS, INC.	32.5	20.2	127.1	45.3	NO	NO
1010492	FAITHFUL FRIENDS PET CREMATION LLC	36.0	23.7	3.3	3.3	NO	NO
1010505	AGRI-SOURCE FUELS, LLC	49.6	37.3	6.6	6.6	NO	NO
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA[1]	24.3	12.0	10706.8	10700.0	NO	YES
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA[1]	27.9	15.6	5067.3	5063.8	NO	YES
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA[1]	33.7	21.4	3840.4	3837.8	NO	YES
1030017	S. E. CEMETERIES OF FLORIDA, L.L.C.	37.7	25.4	4.6	4.6	NO	NO
1030018	PINELLAS CO BOARD OF CO COMMISSIONERS	43.3	31.0	3.1	3.1	NO	NO
1030026	AJAX PAVING INDUSTRIES OF FLORIDA, LLC	38.2	25.9	93.0	48.4	NO	NO
1030035	DIRECTORS SERVICE INC	33.5	21.2	1.8	1.8	NO	NO
1030037	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	28.0	15.7	0.0	0.0	NO	NO
1030044	SUNCOAST PAVING, INC.	44.6	32.3	74.5	26.5	NO	NO
1030045	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	34.1	21.8	0.0	0.0	NO	NO
1030047	SCI FUNERAL SERVICES OF FLORIDA INC	35.2	22.9	9.1	9.1	NO	NO
1030060	CITY OF LARGO - WWTP	32.2	19.9	6.2	6.2	NO	NO
1030078	FLORIDA ROCK INDUSTRIES INC	30.0	17.7	0.0	0.0	NO	NO
1030091	MORTON PLANT MEASE HEALTH CARE	41.2	28.9	149.2	80.0	NO	NO
1030112	CATALENT PHARMA SOLUTIONS, LLC	29.8	17.5	11.2	11.2	NO	NO
1030114	MI METALS, INC.	29.1	16.8	8.8	12.1	NO	NO
1030117	PINELLAS COUNTY UTILITITES ADMIN.[1]	30.4	18.1	2803.5	2802.7	NO	YES
1030119	MADICO WINDOW FILMS, INC.	36.0	23.7	1.5	1.5	NO	NO
1030132	SPECTRA METAL SALES, INC.	33.7	21.4	9.2	9.2	NO	NO
1030136	PET ANGEL WORLD SERVICES LLC	36.1	23.8	0.1	0.1	NO	NO
1030147	SONNY GLASBRENNER, INC.	30.9	18.6	123.5	46.2	NO	NO
1030153	HOWCO ENVIRONMENTAL SERVICES, INC.	37.9	25.6	7.5	7.7	NO	NO
1030180	INTERPRINT, INC.	30.4	18.1	0.2	0.2	NO	NO
1030214	LIFE-LIKE ACQUISITIONS, INC.	39.6	27.3	6.8	6.8	NO	NO
1030217	ETERNAL REST MEMORIES FUNERAL HOME	36.8	24.5	1.7	1.7	NO	NO
1030218	M C GRAPHICS, INC., DBA, SANDY ALEXANDER	28.9	16.6	1.1	1.1	NO	NO
1030227	CITY OF CLEARWATER	32.0	19.7	0.0	0.0	NO	NO
1030228	CITY OF CLEARWATER	40.0	27.7	0.0	0.0	NO	NO
1030229	CITY OF CLEARWATER	32.6	20.3	0.0	0.0	NO	NO
1030230	CITY OF DUNEDIN	38.1	25.8	0.0	0.0	NO	NO
1030231	CITY OF LARGO	32.3	20.0	0.0	0.0	NO	NO
1030232	PINELLAS COUNTY GOVERNMENT	46.5	34.2	0.0	0.0	NO	NO
1030233	PINELLAS COUNTY GOVERNMENT	42.4	30.1	0.0	0.0	NO	NO
1030234	PINELLAS COUNTY GOVERNMENT	38.7	26.4	8.8	8.8	NO	NO
1030235	CITY OF ST. PETERSBURG	33.0	20.7	0.0	0.0	NO	NO
1030236	CITY OF ST. PETERSBURG	27.9	15.6	0.0	0.0	NO	NO
1030237	CITY OF ST. PETERSBURG	40.2	27.9	0.0	0.0	NO	NO
1030238	CITY OF ST. PETERSBURG	40.6	28.3	0.0	0.0	NO	NO
1030240	COX TARGET MEDIA, INC.	38.2	25.9	0.1	0.1	NO	NO
1030282	ANDERSON-MCQUEEN FUNERAL HOME	40.1	27.8	2.3	2.3	NO	NO
1030288	BAY LINEN, INC.	32.3	20.0	14.4	14.3	NO	NO

[redacted]ility	Company Name	Distance from EFT Center D_1 (km)	Distance from EFT SIA D_2 km	Total Shortterm NO_2 Emissions (tpy)	Total Longterm NO_2 Emissions (tpy)	1-hour Screening: Within 10 km of EFT (D_1<10)?	Annual Screening: Within 50 km of SIA and Longterm Emissions over $20D_2$?
1030443	LORAD CHEMICAL CORPORATION	33.8	21.5	2.4	2.4	NO	NO
1030473	LIGHTHOUSE FUNERAL SERVICES, LLC	30.6	18.3	2.2	2.2	NO	NO
1030509	COX TARGET MEDIA, INC.	30.1	17.8	10.6	10.6	NO	NO
1030512	VETERANS FUNERAL CARE	32.3	20.0	0.7	0.7	NO	NO
1030516	GEE & SORENSEN FUNERAL HOME & CREMATION	34.3	22.0	2.0	2.0	NO	NO
1030527	GULFSTREAM NATURAL GAS, L.L.C.	24.3	12.0	0.0	0.0	NO	NO
1050001	CITROSUCO NORTH AMERICA, INC.	87.9	75.6	79.7	79.7	NO	NO
1050002	CITRUS WORLD, INC.	77.0	64.7	491.5	434.6	NO	NO
1050003	LAKELAND ELECTRIC[2,1]	45.8	33.5	2050.4	1703.0	NO	YES
1050004	LAKELAND ELECTRIC[2,1]	46.7	34.4	18600.8	16772.6	NO	YES
1050014	STANDARD SAND & SILICA CO	81.7	69.4	54.4	37.2	NO	NO
1050015	US BEVERAGE PACKING LAKELAND PLANT	35.9	23.6	20.9	20.8	NO	NO
1050021	ASHLAND INC.	48.0	35.7	4.8	4.8	NO	NO
1050023	CUTRALE CITRUS JUICES USA,INC	58.1	45.8	214.3	109.2	NO	NO
1050034	MOSAIC FERTILIZER LLC	45.5	33.2	0.0	0.0	NO	NO
1050045	BARTOW CITRUS PRODUCTS, LLC.	55.5	43.2	7.0	7.0	NO	NO
1050046	MOSAIC FERTILIZER, LLC	46.1	33.8	227.3	227.3	NO	NO
1050055	MOSAIC FERTILIZER LLC	48.9	36.6	271.5	215.0	NO	NO
1050059	MOSAIC FERTILIZER LLC[2]	35.6	23.3	641.9	643.0	NO	YES
1050081	THE QUIKRETE COMPANIES, INC.	47.7	35.4	7.4	7.4	NO	NO
1050090	CARIBBEAN DISTILLERS LLC	66.5	54.2	29.3	29.3	NO	NO
1050095	LAKELAND REGIONAL MEDICAL CENTER	44.0	31.7	98.7	98.7	NO	NO
1050096	CARIBBEAN DISTILLERS LLC	58.0	45.7	58.9	26.8	NO	NO
1050097	ARRMAZ CUSTOM CHEMICALS	44.9	32.6	12.2	12.2	NO	NO
1050099	AOC, L.L.C.	39.8	27.5	39.5	39.5	NO	NO
1050100	MOMENTIVE SPECIALTY CHEMICALS, INC.	46.8	34.5	8.5	8.5	NO	NO
1050113	STANDARD SAND & SILICA COMPANY	87.9	75.6	1.0	1.0	NO	NO
[redacted]0125	LHOIST NORTH AMERICA OF ALABAMA	34.5	22.2	26.6	21.8	NO	NO
[redacted]0127	JUICE BOWL PRODUCTS	45.7	33.4	124.1	124.0	NO	NO
1050134	HEATH FUNERAL CHAPEL INC	43.8	31.5	1.8	1.8	NO	NO
1050139	SCHWARZ PARTNERS	38.3	26.0	0.0	0.0	NO	NO
1050142	DSE, INC	59.6	47.3	0.0	0.0	NO	NO
1050148	FLANDERS ELECTRIC MOTOR SERVICE, INC	46.8	34.5	2.5	1.3	NO	NO
1050158	HIGH PERFORMANCE SYSTEMS, INC.	63.9	51.6	1.1	1.0	NO	NO
1050169	METALCOAT INC OF FLORIDA	40.9	28.6	3.5	2.5	NO	NO
1050174	PEPPERIDGE FARM, INC	41.3	29.0	23.1	23.1	NO	NO
1050175	GREIF PACKAGING LLC	59.3	47.0	0.0	0.0	NO	NO
1050179	FOUNDATION PARTNERS OF FLORIDA LLC	59.3	47.0	0.0	0.0	NO	NO
1050192	CARPENTER CO., INSULATION DIVISION	33.7	21.4	0.0	0.0	NO	NO
1050208	INDUSTRIAL CONTAINER SERV-LAKELAND, LLC	55.5	43.2	2.3	2.0	NO	NO
1050210	AMERICOAT CORPORATION	47.3	35.0	0.0	0.0	NO	NO
1050215	WOOD MULCH PRODUCTS, INC.	49.7	37.4	56.4	56.3	NO	NO
1050216	WHEELABRATOR RIDGE ENERGY INC.	53.0	40.7	394.7	394.4	NO	NO
1050217	POLK POWER PARTNERS, L.P.[2]	51.2	38.9	821.4	67.4	NO	NO
1050221	AUBURNDALE POWER PARTNERS, LP[1]	57.4	45.1	2156.4	1193.6	NO	YES
1050223	FLORIDA POWER CORPDBA PROGRESS ENERGY FL[1]	57.5	45.2	3318.4	1639.8	NO	YES
1050227	CENTRAL FLORIDA CREMATORY OF POLK COUNTY	43.0	30.7	0.0	0.0	NO	NO
1050231	ORANGE COGENERATION LIMITED PARTNERSHIP	55.6	43.3	575.0	444.9	NO	NO
1050233	TAMPA ELECTRIC COMPANY[2,1]	46.5	34.2	6298.1	3436.5	NO	YES
1050234	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA[2,1]	53.8	41.5	13364.2	1499.3	NO	YES
1050239	CARLISLE CONSTRUCTION MATERIALS, INC.	34.8	22.5	0.0	0.0	NO	NO
1050272	SERVICE CORPORATION INTERNATIONAL	56.2	43.9	2.0	2.0	NO	NO
1050276	AERCON FLORIDA, LLC	77.5	65.2	0.0	0.0	NO	NO
1050298	POLK CO BOARD OF COUNTY COMMISSIONERS -	52.9	40.6	88.3	88.3	NO	NO
1050312	MASTER CONTAINERS, INC.	40.8	28.5	15.8	15.8	NO	NO
1050319	CLARK ENVIRONMENTAL INC	39.6	27.3	172.3	99.0	NO	NO
1050320	KEYMARK CORP OF FLORIDA	39.9	27.6	17.5	17.8	NO	NO
1050323	J L LOCKE & COMPANY CREMATION SERVICES	79.5	67.2	1.8	1.8	NO	NO
[redacted]0325	SOUTHERN BAKERIES, INC.	40.9	28.6	0.0	0.0	NO	NO
[redacted]0334	CALPINE CONSTRUCTION FINANCE COMPANY, LP[1]	57.6	45.3	2883.1	779.0	NO	NO
1050343	ORGANIC MATTERS INC	56.1	43.8	0.3	0.3	NO	NO
1050352	LAKELAND ELECTRIC[2,1]	36.6	24.3	1255.9	262.0	NO	NO

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1050366	COCA-COLA N. AMERICA (WAS MINUTE MAID)	59.4	47.1	44.1	44.1	NO	NO
1050369	MORGAN TRUCK BODY, LLC	50.3	38.0	1.7	1.7	NO	NO
1050375	OWENS CORNING INSULATING SYSTEMS, LLC	41.0	28.7	4.2	4.2	NO	NO
1050377	BONSAL AMERICAN, INC.	57.5	45.2	8.2	8.1	NO	NO
1050380	CELLYNNE HOLDINGS, INC.	76.9	64.6	55.6	55.6	NO	NO
1050387	GENERAL ASPHALT OF LAKELAND, LLC	50.5	38.2	217.2	35.0	NO	NO
1050394	LASTING PAWS PET CREMATION INC	40.0	27.7	2.5	2.5	NO	NO
1050400	THE LANE CONSTRUCTION CORPORATION	41.4	29.1	16.5	16.5	NO	NO
1050415	DRUM RECYCLERS, INC.	60.4	48.1	9.0	9.0	NO	NO
1050418	MIZKAN AMERICAS, INC.	66.5	54.2	5.5	5.5	NO	NO
1050420	TRAILER REBUILDERS, INC.	74.7	62.4	0.0	0.0	NO	NO
1050422	GTECH PRINTING CORP.	35.7	23.4	1.4	1.4	NO	NO
1050429	RICK HOLBORN EXCAVATION, INC.	79.5	67.2	0.0	0.0	NO	NO
1050444	U.S. ECOGEN POLK, LLC	64.4	52.1	246.0	246.0	NO	NO
7770048	BETTER ROADS, INC.	144.2	131.9	19.0	19.0	NO	NO
7770073	APAC-SOUTHEAST INC.	31.2	18.9	214.5	43.4	NO	NO
7770380	FLORIDA SOIL CEMENT LLC	36.4	24.1	12.3	12.3	NO	NO
7771101	WOODRUFF & SONS INC	2.3	-10.0	23.8	5.7	YES	YES
7774801	FLORIDA SOIL CEMENT LLC	5.9	-6.4	0.0	0.0	NO	NO
7774804	THE LANE CONSTRUCTION CORPORATION	48.5	36.2	107.7	33.4	NO	NO
7775052	WOODRUFF & SONS INC	61.0	48.7	23.8	5.7	NO	NO
7775089	WOODRUFF & SONS INC	61.0	48.7	1.6	1.6	NO	NO
7775229	CRUSH-IT INC	172.7	160.4	0.0	0.0	NO	NO
7775280	APAC-SOUTHEAST, INC.	60.1	47.8	86.3	15.4	NO	NO
7775300	WOODRUFF AND SONS INC	41.0	28.7	0.0	0.0	NO	NO
7775345	JVS CONTRACTING INC	38.6	26.3	0.0	0.0	NO	NO
7775424	AJAX PAVING INDUSTRIES, INC.	8.2	-4.1	22.7	22.7	YES	YES
7775438	DGP&S CONSTRUCTION INC	7.6	-4.7	0.0	0.0	NO	NO

Note:

[1] Further refined to exclude all facilities beyond 10km of the EFT center as per the March 2011 EPA Guidance document. Only applies to 1-hour modeling

[2] Emission rates reflect the total facility emission rate after EU duplicates were removed

[3] Emergency generator units only at this facility. Removed from hourly inventory as per EPA Guidance of March 2011

Table 3.7
Summary of 1-hour NAAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter	NO_2/NO_x In Stack Ratio
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)	
570001	JOHNSON CONTROLS BATTERY GROUP, INC	59_1	359900	3102500	13.5	0.00E+00	11.6	308	9.9	0.9	0.5
		59_2	359900	3102500	13.5	7.80E-03	10.1	316	10.9	0.8	0.5
		59_3[4]	359900	3102500	13.5	6.44E-03	10.7	533	20.0	0.3	0.5
		59_4[4]	359900	3102500	13.5	3.17E-02	10.7	533	20.0	0.3	0.5
		59_5	359900	3102500	13.5	2.88E-03	12.2	589	4.8	0.1	0.5
		59_6[4]	359900	3102500	13.5	3.17E-02	10.7	533	20.0	0.3	0.5
		59_7[4]	359930	3102750	12.4	1.55E-02	10.7	533	20.0	0.3	0.5
570003	CF INDUSTRIES, INC.	3_1	358100	3090400	1.5	2.62E-01	7.6	533	8.5	0.8	0.5
		3_2[5]	358100	3090400	1.5	1.55E-01	5.0	533	5.0	1.0	0.5
570016	CITGO PETROLEUM CORPORATION	48_1	357600	3090400	0.0	5.64E-01	4.6	922	7.0	0.4	0.5
570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	5_1[3]	358030	3092750	0.0	2.56E+00	5.0	672	50.0	0.2	0.5
570025	TRADEMARK NITROGEN CORP	7_1	367300	3092600	7.6	2.16E+00	15.2	450	32.9	0.5	0.5
570040	TAMPA ELECTRIC COMPANY	9_1	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_2	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_3	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_4	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_5	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_6	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_7	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8	0.5
		9_8	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_9	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_10	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_11	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_12	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_13	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_14	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
		9_15	360000	3087500	0.0	4.04E+00	18.3	751	30.9	2.9	0.5
0041	FLORIDA HEALTH SCIENCES CTR, INC	49_1[4]	356400	3091000	0.3	4.55E-03	36.6	300	10.0	1.8	0.5
		49_2[4]	356400	3091000	0.3	2.27E-01	36.6	477	10.0	0.9	0.5
		49_3[4]	356400	3091000	0.3	2.27E-01	36.6	477	10.0	0.9	0.5
570056	BUILDING MATERIALS MANUFACTURING CORP	10_1	362500	3087100	1.5	6.75E-02	10.7	714	23.4	0.6	0.5
		10_2	362200	3087200	1.5	6.51E-02	9.1	408	12.1	0.6	0.5
		10_3	362200	3087200	1.5	1.02E-01	7.6	714	24.3	0.6	0.5
570061	TAMPA ARMATURE WORKS	11_1	365660	3091750	5.9	8.63E-03	4.6	922	0.3	0.6	0.5
		11_2	365660	3091750	5.9	4.32E-03	4.6	477	10.1	0.2	0.5
		11_3	365700	3091800	5.0	2.65E-02	8.2	1033	5.9	0.5	0.5
570080	MARATHON PETROLEUM COMPANY LP	12_1	359500	3091700	0.0	2.45E-02	15.2	299	4.6	0.6	0.5
		12_2[5]	358540	3091700	1.8	2.18E-01	7.6	533	5.0	0.8	0.5
		12_5[3]	358540	3091700	1.8	1.18E-02	5.0	672	50.0	0.2	0.5
570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	50_1	358000	3089100	0.3	7.23E-02	12.2	294	3.7	0.3	0.5
570085	CENTRAL FLORIDA PIPELINE	51_1[5]	358000	3089000	0.0	7.15E-02	6.1	298	0.6	0.0	0.5
		51_2	358000	3089000	0.0	1.32E-01	6.1	298	0.6	0.0	0.5
570090	MASTER - HALCO, INC.	13_1	368200	3094600	12.0	2.01E-01	4.3	320	9.5	1.1	0.5
570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	15_1	363600	3098500	19.4	2.30E-01	3.7	394	18.0	0.8	0.5
570119	TRADEMARK METALS RECYCLING, LLC	45_1[4]	364700	3093600	6.2	1.08E-01	7.6	533	5.0	0.2	0.5
		16_1	364700	3093600	6.2	4.79E-02	15.2	405	20.2	1.2	0.5
		16_2	364700	3093600	6.2	7.19E-02	15.2	405	20.2	1.2	0.5
570127	CITY OF TAMPA	17_1	360200	3092210	0.9	5.06E+00	61.3	430	22.3	1.3	0.5
		17_2	360200	3092210	0.9	5.06E+00	61.3	430	22.3	1.3	0.5
		17_3	360200	3092210	0.9	5.06E+00	61.3	430	22.3	1.3	0.5
		17_4	360200	3092210	0.9	5.06E+00	61.3	430	22.3	1.3	0.5
570160	BALL METAL BEVERAGE CONTAINER CORP.	52_1	362000	3103200	21.4	5.24E-01	13.1	380	9.0	0.5	0.5
		52_2	362000	3103200	21.4	6.21E-02	15.5	455	20.4	0.0	0.5
		52_3[5]	362000	3103200	21.4	1.39E-02	15.8	369	7.5	0.3	0.5
		52_4	362000	3103200	21.4	6.62E-02	15.8	369	7.5	0.3	0.5
		52_5	362000	3103200	21.4	4.42E-02	15.8	369	7.5	0.3	0.5
570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	18_1[3]	364000	3098100	20.1	5.06E-01	3.0	672	45.3	0.2	0.5
		18_2[3]	364000	3098100	20.1	9.58E-01	9.1	533	14.9	1.4	0.5
		18_3[3]	364000	3098100	20.1	7.48E-02	3.0	672	45.3	0.2	0.5
570224	HARSCO MINERALS	53_1	362200	3085500	1.5	5.18E-01	9.1	327	10.7	1.2	0.5
0252	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	60_1[5]	358800	3086900	0	2.47E-01	3.0	297	28.7	0.5	0.5

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter	NO_2/NOx In Stack Ratio
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)	
570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	19_1	368200	3092700	10.9	7.39E+00	67.1	416	22.1	1.6	0.5
		19_2	368200	3092700	10.9	7.39E+00	67.1	416	22.1	1.6	0.5
		19_3	368200	3092700	10.9	7.39E+00	67.1	416	22.1	1.6	0.5
		19_4	368200	3092700	10.9	1.01E+01	67.1	405	31.1	1.6	0.5
570286	TAMPA SHIP, LLC	20_1[3]	358000	3089000	0.0	5.41E+00	3.0	672	45.3	0.4	0.5
570373	CITY OF TAMPA-WASTEWATER DEPT	21_1	364000	3089500	4.2	1.73E-01	22.9	375	25.2	0.9	0.5
		21_2	364000	3089500	4.2	1.55E-02	22.9	375	8.8	1.5	0.5
		21_4	364000	3089500	4.2	1.77E+00	10.7	661	27.6	0.7	0.5
		21_5	364000	3089500	4.2	1.77E+00	10.7	661	27.6	0.7	0.5
		21_6[3]	364000	3089500	4.2	1.56E+00	3.0	672	50.0	0.3	0.5
570442	GULF MARINE REPAIR/HENDRY CORPORATIONS	22_1[3]	360300	3091900	0.6	4.11E+00	5.0	672	50.0	0.3	0.5
570461	BLACKLIDGE EMULSIONS INCORPORATED	23_1[4]	359500	3093200	1.9	3.02E-01	9.1	533	15.0	1.4	0.5
571151	INTERNATIONAL PAPER COMPANY	24_1[4]	362800	3098300	12.0	2.94E-01	10.4	533	5.0	0.6	0.5
571209	THE LANE CONSTRUCTION COMPANY	54_1	359860	3088090	0.3	3.97E-01	9.4	422	26.9	1.2	0.5
		54_2[3]	359870	3088090	0.3	2.98E-01	4.6	672	45.0	0.2	0.5
571217	SEA 3 OF FLORIDA, INC.	55_1[5]	360100	3087100	0.3	1.29E-03	12.2	ambient	5.0	0.6	0.5
		55_2[4]	360100	3087100	0.3	3.94E-01	12.2	533	10.0	0.9	0.5
		55_3[4]	360100	3087100	0.3	5.99E-01	4.6	533	10.0	1.5	0.5
571240	CARGILL INC.- SALT DIVISION	25_1	359750	3090370	0.0	1.94E-02	6.7	339	14.5	0.8	0.5
571290	TITAN AMERICA, LLC	26_1[3]	359940	3087810	2.3	3.33E+00	3.0	672	45.3	0.3	0.5
		26_2[3]	359940	3087810	2.3	8.72E-01	2.1	672	45.3	0.2	0.5
		26_3[3]	359940	3087810	2.3	1.50E+00	2.1	672	45.3	0.2	0.5
		26_4[3]	359940	3087810	2.3	1.73E-01	3.0	672	45.3	0.2	0.5
		26_5	359940	3087810	2.3	1.09E-01	22.9	294	12.5	1.5	0.5
		26_6[3]	359940	3087810	2.3	2.10E-01	2.1	672	45.3	0.1	0.5
571301	L.V. THOMPSON, INC. (TAMCO)	27_1	361610	3092190	0.6	2.39E-01	2.7	727	7.4	0.8	0.5
571337	TAMPA PAVEMENT CONSTRUCTORS, INC., A SUB	28_1[3]	364300	3097640	11.4	4.09E-01	5.0	672	50.0	0.2	0.5
		28_2	364300	3097640	11.4	3.97E-01	8.2	422	13.8	1.4	0.5
571339	TRINITY MATERIALS, LLC	57_1[3]	360310	3087720	1.9	3.32E+00	3.0	672	45.0	0.2	0.5
571342	BLACKLIDGE EMULSIONS, INC.	29_1[4]	363720	3087370	2.8	3.57E-02	5.0	533	5.0	1.0	0.5
[redacted]1402	ANCHOR SANDBLASTING AND PAINTING, INC	30_1[3]	361150	3089420	1.5	8.23E-01	5.0	672	50.0	0.2	0.5
		30_2[4]	361150	3089420	1.5	6.62E-02	5.0	533	5.0	2.4	0.5
571421	NEXLUBE TAMPA, LLC	58_1[4]	361480	3087200	0.9	1.79E-01	15.2	644	1.3	0.6	0.5
		58_2[4]	361480	3087200	0.9	1.47E-01	7.6	644	1.3	0.6	0.5
		58_3[4]	361480	3087200	0.9	1.76E+00	7.6	644	1.3	0.6	0.5
		58_4[4]	361480	3087200	0.9	6.91E-02	7.6	644	1.3	0.6	0.5
7771101	WOODRUFF & SONS INC[2]	44_1[3]	361885	3093420	5.6	6.86E-01	3.0	672	45.3	0.2	0.5
7775424	AJAX PAVING INDUSTRIES, INC.	56_1[3]	362810	3085710	1.5	2.56E-01	3.0	672	50.0	0.2	0.4[1]
		56_2	362810	3085710	1.5	3.97E-01	12.2	383	13.4	1.2	0.5

Notes:

[1] Modified conservative ISR for a diesel generator

[2] Coordinates verified and changed in previous PSD permit application (October 2012)

[3] Modified source parameters (diesel engine)

[4] Modified source parameters (boiler/heater)

[5] Parameters filled in with conservative assumptions

Table 3.8
Summary of Annual NAAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
490015	HARDEE POWER PARTNERS LIMITED	1_1	404930	3057290	35.3	4.83E+01	27.4	386	23.6	4.4
		1_2	404930	3057290	35.3	4.83E+01	27.4	391	23.1	4.4
		1_3	404930	3057290	35.3	4.83E+01	22.9	803	28.7	5.5
		1_4	404800	3057400	35.1	2.10E+00	25.9	810	43.3	4.5
490340	SEMINOLE ELECTRIC COOPERATIVE, INC.	2_1	405100	3057750	36.6	1.30E+01	53.3	365	2.0	5.5
		2_2	405100	3057750	36.6	1.30E+01	53.3	365	2.0	5.5
		2_3	405100	3057750	36.6	2.20E+00	18.3	750	30.8	2.9
		2_4	405100	3057750	36.6	2.20E+00	18.3	750	30.8	2.9
		2_5	405100	3057750	36.6	2.20E+00	18.3	750	30.8	2.9
		2_6	405100	3057750	36.6	2.20E+00	18.3	750	30.8	2.9
		2_7	405100	3057750	36.6	2.20E+00	18.3	750	30.8	2.9
570001	JOHNSON CONTROLS BATTERY GROUP, INC	46_1	359900	3102500	13.5	0.00E+00	11.6	308	9.9	0.9
		46_2	359900	3102500	13.5	7.78E-03	10.1	316	10.9	0.8
		46_3[4]	359900	3102500	13.5	6.43E-03	10.7	533	20.0	0.3
		46_4[4]	359900	3102500	13.5	3.16E-02	10.7	533	20.0	0.3
		46_5	359900	3102500	13.5	2.87E-03	12.2	589	4.8	0.1
		46_6[4]	359900	3102500	13.5	3.16E-02	10.7	533	20.0	0.3
		46_7[4]	359930	3102750	12.4	1.55E-02	10.7	533	20.0	0.3
570003	CF INDUSTRIES, INC.	3_1	358100	3090400	1.5	2.62E-01	7.6	533	8.5	0.8
		3_2[5]	358100	3090400	1.5	1.55E-01	5.0	533	5.0	1.0
570008	MOSAIC FERTILIZER, LLC	4_1	364590	3082380	0.0	2.01E+00	45.7	340	13.4	2.3
		4_2	363300	3082400	0.7	1.23E+00	45.7	340	10.4	2.4
		4_3	364590	3082380	0.0	1.41E+00	45.7	350	12.7	2.7
		4_4	364590	3082380	0.0	1.27E-01	38.4	329	11.3	2.4
		4_5	364590	3082380	0.0	6.41E+00	6.1	489	15.8	1.2
		4_6	362900	3082500	1.5	2.52E+00	40.5	315	15.2	2.1
		4_7[1]	363000	3082300	0.0	2.87E-03	N/A	N/A	N/A	N/A
		4_8	364590	3082380	0.0	8.17E-01	38.1	339	17.1	1.8
		4_9	364590	3082380	0.0	8.17E-01	38.1	339	17.1	1.8
570016	CITGO PETROLEUM CORPORATION	47_1	357600	3090400	0.0	5.63E-01	4.6	922	7.0	0.4
		47_2[5]	358040	3090620	1.5	1.58E-03	1.8	922	47.5	0.2
570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	5_1[3]	358030	3092750	0.0	2.56E+00	5.0	672	45.3	0.2
570024	KINDER MORGAN OLP "C"	6_1[5]	361480	3087490	1.0	2.43E+00	5.0	ambient	5.0	0.1
		6_2[5]	361480	3087490	1.0	1.93E+00	5.0	ambient	5.0	0.1
570025	TRADEMARK NITROGEN CORP	7_1	367300	3092600	7.6	2.16E+00	15.2	450	32.9	0.5
570028	NEW NGC, INC.	65_1	348830	3082690	1.5	1.06E-01	12.8	450	18.0	0.3
		65_2	348830	3082690	1.5	1.06E-01	12.8	450	18.9	0.3
		65_3	348830	3082690	1.5	8.83E-02	12.8	450	20.7	0.3
		65_4	348830	3082690	1.5	1.06E-01	12.8	450	18.6	0.3
		65_5	347300	3082700	1.2	2.59E-01	12.8	450	21.6	0.3
		65_6	347300	3082700	1.2	2.59E-01	12.8	450	21.6	0.3
		65_7	347300	3082700	1.2	2.59E-01	12.8	450	21.6	0.3
		65_8	347300	3082700	1.2	2.59E-01	12.8	450	21.6	0.3
		65_9	347300	3082700	1.2	1.32E+00	14.3	427	20.4	0.8
		65_10	348830	3082690	1.5	5.29E-01	19.5	358	11.8	1.1
		65_11[5]	348830	3082690	1.5	1.33E+00	10.7	422	20.4	0.9
		65_12	347300	3082700	1.2	8.83E-02	12.8	450	21.9	0.3
		65_13	347300	3082700	1.2	8.83E-02	12.8	450	21.9	0.3
		65_14	347300	3082700	1.2	2.62E-01	27.4	366	13.6	1.2
		65_15	348830	3082690	1.5	2.62E-01	27.4	366	23.0	0.9
570039	TAMPA ELECTRIC COMPANY (TEC)	8_1	361716	3075060	0.0	3.76E+02	149.4	419	35.3	7.3
		8_2	361720	3074980	0.0	3.72E+02	149.4	325	26.7	7.3
		8_3	361820	3075060	0.0	3.63E+02	149.4	426	15.6	7.3
		8_4	361820	3075040	0.1	3.27E+02	149.4	326	18.1	7.3
		8_5	361900	3075000	0.3	3.69E-01	18.3	751	30.9	2.9
		8_6	361900	3075000	0.3	3.71E-01	18.3	751	30.9	2.9
		8_7	363150	3074910	2.1	2.30E-02	4.6	786	87.1	0.2
		8_8	363150	3074910	2.1	4.95E-03	0.9	298	14.0	0.1

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
570040	TAMPA ELECTRIC COMPANY	9_1	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_2	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_3	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_4	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_5	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_6	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_7	360010	3087490	0.0	2.91E+00	45.7	373	18.3	5.8
		9_8	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_9	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_10	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_11	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_12	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_13	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_14	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_15	360000	3087500	0.0	1.61E+00	18.3	751	30.9	2.9
		9_16	360000	3087500	0.0	2.30E-02	4.6	786	87.1	0.2
570041	FLORIDA HEALTH SCIENCES CTR, INC	48_1[4]	356400	3091000	0.3	4.55E-03	36.6	300	10.0	1.8
		48_2[4]	356400	3091000	0.3	2.27E-01	36.6	477	10.0	0.9
		48_3[4]	356400	3091000	0.3	2.27E-01	36.6	477	10.0	0.9
570056	BUILDING MATERIALS MANUFACTURING CORP	10_1	362500	3087100	1.5	6.74E-02	10.7	714	23.4	0.6
		10_2	362200	3087200	1.5	6.50E-02	9.1	408	12.1	0.6
		10_3	362200	3087200	1.5	1.02E-01	7.6	714	24.3	0.6
570061	TAMPA ARMATURE WORKS	11_1	365660	3091750	5.9	8.62E-03	4.6	922	0.3	0.6
		11_2	365660	3091750	5.9	4.31E-03	4.6	477	10.1	0.2
		11_3	365700	3091800	5.0	2.64E-02	8.2	1033	5.9	0.5
570080	MARATHON PETROLEUM COMPANY LP	12_1	359500	3091700	0.0	2.44E-02	15.2	299	4.6	0.6
		12_2[5]	358540	3091700	1.8	2.18E-01	7.6	533	5.0	0.8
		12_3[5]	358540	3091700	1.8	6.47E-03	1.8	ambient	5.0	0.2
		12_4[5]	358540	3091700	1.8	3.85E-03	1.8	ambient	5.0	0.2
		12_5[3]	358540	3091700	1.8	1.18E-02	5.0	672	50.0	0.2
570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	49_1	358000	3089100	0.3	7.22E-02	12.2	294	3.7	0.3
[illegible]70085	CENTRAL FLORIDA PIPELINE	50_1[5]	358000	3089000	0.0	7.14E-02	6.1	298	0.6	0.0
		50_2	358000	3089000	0.0	1.32E-01	6.1	298	0.6	0.0
		50_3[3]	358000	3089000	0.0	6.84E-01	4.6	533	10.0	0.2
570089	ST. JOSEPH'S HOSPITAL	59_1	353300	3095900	10.1	9.31E-01	24.4	477	12.6	0.6
		59_2	353040	3095090	10.7	9.17E-01	9.1	464	12.8	0.3
		59_3	353300	3095900	10.1	1.61E-01	10.7	450	7.3	0.6
		59_4	353300	3095900	10.1	1.61E-01	10.7	450	7.3	0.6
		59_5	353300	3095900	10.1	1.61E-01	10.7	450	9.6	0.5
		59_6	353300	3095900	10.1	4.02E-01	6.7	751	28.0	0.6
		59_7	353300	3095900	10.1	4.02E-01	6.7	751	28.0	0.6
570090	MASTER - HALCO, INC.	13_1	368200	3094600	12.0	2.01E-01	4.3	320	9.4	1.1
570092	KINDER MORGAN PORT SUTTON TERMINAL, LLC	14_1[3]	362370	3087050	1.5	2.96E-03	5.0	ambient	5.0	0.0
570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	15_1	363600	3098500	19.4	1.91E-01	3.7	394	18.0	0.8
570119	TRADEMARK METALS RECYCLING, LLC	16_1	364700	3093600	6.2	4.80E-02	15.2	405	20.2	1.2
		16_2	364700	3093600	6.2	7.19E-02	15.2	405	20.2	1.2
		16_3[4]	364700	3093600	6.2	7.39E-02	7.6	533	20.0	0.2
570127	CITY OF TAMPA	17_1	360200	3092210	0.9	4.88E+00	61.3	430	22.3	1.3
		17_2	360200	3092210	0.9	4.88E+00	61.3	430	22.3	1.3
		17_3	360200	3092210	0.9	4.88E+00	61.3	430	22.3	1.3
		17_4	360200	3092210	0.9	4.88E+00	61.3	430	22.3	1.3
570160	BALL METAL BEVERAGE CONTAINER CORP.	51_1	362000	3103200	21.4	5.23E-01	13.1	380	9.0	0.5
		51_2	362000	3103200	21.4	6.20E-02	15.5	455	20.4	0.0
		51_3[5]	362000	3103200	21.4	1.39E-02	15.8	369	7.5	0.3
		51_4	362000	3103200	21.4	6.61E-02	15.8	369	7.5	0.3
		51_5	362000	3103200	21.4	4.41E-02	15.8	369	7.5	0.3
570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	18_1	364000	3098100	20.1	5.06E-01	3.0	672	45.3	0.2
		18_2	364000	3098100	20.1	9.57E-01	9.1	533	14.9	1.4
		18_3	364000	3098100	20.1	7.47E-02	3.0	672	45.3	0.2
570224	HARSCO MINERALS	52_1	362200	3085500	1.5	5.17E-01	9.1	327	10.7	1.2
570252	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	60_1	358800	3086900	0.0	2.47E-01	3.0	297	28.7	0.9
570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	19_1	368200	3092700	10.9	7.36E+00	67.1	416	22.1	1.6
		19_2	368200	3092700	10.9	7.36E+00	67.1	416	22.1	1.6
		19_3	368200	3092700	10.9	7.36E+00	67.1	416	22.1	1.6
		19_4	368200	3092700	10.9	1.00E+01	67.1	405	31.1	1.6
[illegible]0286	TAMPA SHIP, LLC	20_1	358000	3089000	0.0	5.40E+00	3.0	672	45.3	0.4

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
570373	CITY OF TAMPA-WASTEWATER DEPT.	21_1	364000	3089500	4.2	1.73E-01	22.9	375	25.2	0.9
		21_2	364000	3089500	4.2	1.55E-02	22.9	375	8.8	1.5
		21_3	358250	3089620	1.2	3.31E-02	15.2	755	28.7	0.5
		21_4	364000	3089500	4.2	1.31E+00	10.7	661	27.6	0.7
		21_5	364000	3089500	4.2	1.31E+00	10.7	661	27.6	0.7
		21_6[3]	364000	3089500	4.2	1.56E+00	3.0	672	50.0	0.3
570442	GULF MARINE REPAIR/HENDRY CORPORATIONS	22_1[3]	360300	3091900	0.6	4.11E+00	5.0	672	50.0	0.3
570461	BLACKLIDGE EMULSIONS INCORPORATED	23_1[4]	359500	3093200	1.9	3.02E-01	9.1	533	15.0	1.4
570480	UNIVERSITY OF SOUTH FLORIDA (USF)	53_1	360770	3104760	11.6	2.10E-01	19.8	255	0.0	1.4
		53_2	360770	3104760	11.6	2.76E-01	19.8	450	0.0	1.4
571151	INTERNATIONAL PAPER COMPANY	24_1[5]	362800	3098300	12.0	2.94E-01	10.4	533	5.0	0.6
571209	THE LANE CONSTRUCTION COMPANY	54_1	359860	3088090	0.3	3.97E-01	9.4	422	26.9	1.2
		54_2[3]	359870	3088090	0.3	2.97E-01	4.6	672	45.0	0.0
571217	SEA 3 OF FLORIDA, INC.	55_1[5]	360100	3087100	0.3	1.29E-03	12.2	ambient	5.0	0.6
		55_2[4]	360100	3087100	0.3	3.94E-01	12.2	533	10.0	0.9
		55_3[4]	360100	3087100	0.3	5.98E-01	4.6	533	10.0	1.5
571240	CARGILL INC.- SALT DIVISION	25_1	359750	3090370	0.0	1.94E-02	6.7	672	14.4	0.8
571269	H. LEE MOFFITT CANCER CENTER	61_1	360350	3105080	13.5	7.16E-02	21.0	486	0.0	0.8
		61_2	360350	3105080	13.5	6.60E-02	21.0	486	0.0	0.8
		61_3	360350	3105080	13.5	5.08E-02	21.0	486	0.0	0.6
		61_4[3]	360350	3105080	13.5	1.45E-01	3.0	644	50.0	0.2
		61_5[3]	360350	3105080	13.5	1.45E-01	3.0	644	50.0	0.2
		61_6[3]	360350	3105080	13.5	1.57E-01	3.0	644	50.0	0.2
		61_7[3]	360350	3105080	13.5	1.33E-01	3.0	644	50.0	0.2
		61_8[3]	360350	3105080	13.5	1.33E-01	3.0	644	50.0	0.2
		61_9[3]	360350	3105080	13.5	1.33E-01	3.0	644	50.0	0.2
		61_10[3]	360350	3105080	13.5	1.44E-01	3.0	644	50.0	0.2
571279	FLORIDA GAS TRANSMISSION COMPANY	62_1	372160	3102410	29.2	7.18E-01	18.6	787	42.5	2.1
		62_2	372160	3102410	29.2	7.18E-01	18.6	787	42.5	2.1
571290	TITAN AMERICA, LLC	26_1	359940	3087810	2.3	3.33E+00	3.0	672	45.3	0.2
		26_2	359940	3087810	2.3	8.71E-01	2.1	672	45.3	0.2
		26_3	359940	3087810	2.3	1.50E+00	2.1	672	45.3	0.2
		26_4	359940	3087810	2.3	1.72E-01	3.0	672	45.3	0.2
		26_5	359940	3087810	2.3	1.09E-01	22.9	294	12.5	1.5
		26_6	359940	3087810	2.3	2.10E-01	2.1	672	45.3	0.2
571301	L.V. THOMPSON, INC. (TAMCO)	27_1	361610	3092190	0.6	2.39E-01	2.7	727	7.4	0.8
571337	TAMPA PAVEMENT CONSTRUCTORS, INC., A SUB	28_1[3]	364300	3097640	11.4	4.08E-01	5.0	672	50.0	0.2
		28_2	364300	3097640	11.4	3.97E-01	8.2	422	13.8	1.4
571339	TRINITY MATERIALS, LLC	57_1[3]	360310	3087720	1.9	3.32E+00	3.0	672	45.0	1.5
571342	BLACKLIDGE EMULSIONS, INC.	29_1[5]	363720	3087370	2.8	3.56E-02	5.0	533	5.0	1.0
571402	ANCHOR SANDBLASTING AND PAINTING, INC	30_1[3]	361150	3089420	1.5	8.22E-01	5.0	672	50.0	0.2
		30_2[5]	361150	3089420	1.5	6.61E-02	5.0	533	5.0	2.4
571421	NEXLUBE TAMPA, LLC	58_1[5]	361480	3087200	0.9	1.78E-01	15.2	644	1.3	0.6
		58_2[5]	361480	3087200	0.9	1.47E-01	7.6	644	1.3	0.6
		58_3[5]	361480	3087200	0.9	1.76E+00	7.6	644	1.3	0.6
		58_4[5]	361480	3087200	0.9	8.62E-05	12.2	644	0.0	0.6
		58_5[5]	361480	3087200	0.9	6.90E-02	7.6	644	1.3	0.6
		58_6[5]	361480	3087200	0.9	8.62E-05	30.5	644	0.0	0.6
810010	FLORIDA POWER & LIGHT (PMT)	31_1	367150	3054230	16.8	3.27E+02	152.1	446	23.8	8.3
		31_2	367150	3054230	16.8	3.27E+02	152.1	436	25.1	8.0
		31_3	367150	3054230	16.8	3.72E-03	4.9	650	48.4	0.4
		31_4	367250	3054150	16.2	2.98E+00	36.6	875	31.9	6.7
		31_5[5]	367250	3054150	16.2	2.98E+00	36.6	367	18.0	5.8
		31_6[5]	367250	3054150	16.2	2.98E+00	36.6	367	18.0	5.8
		31_7	367250	3054150	16.2	2.98E+00	36.6	367	18.0	5.8
		31_8	367150	3054230	16.8	1.69E-02	4.9	650	48.4	0.4
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	32_1	324440	3118930	2.9	1.70E+01	152.1	433	18.9	7.3
		32_2	324440	3118930	2.9	1.43E+01	152.1	433	18.9	7.3
		32_3[5]	324440	3118930	2.9	7.06E-03	2.4	ambient	5.0	0.2
		32_4[5]	324440	3118930	2.9	4.82E-03	1.8	ambient	5.0	0.1
1010056	PASCO COUNTY	33_1	347110	3139110	14.9	9.65E+00	83.8	394	25.0	1.4
		33_2	347110	3139110	14.9	9.65E+00	83.8	394	25.0	1.4
		33_3	347110	3139110	14.9	9.65E+00	83.8	394	25.0	1.4

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1010373	SHADY HILLS POWER COMPANY, L.L.C.	34_1	347240	3138710	15.5	7.24E+00	18.3	874	35.4	6.7
		34_2	347280	3138710	15.6	7.24E+00	18.3	874	35.4	6.7
		34_3	347320	3138700	15.8	7.24E+00	18.3	874	35.4	6.7
		34_4	347000	3139000	14.6	6.67E+00	22.9	874	49.2	5.5
		34_5	347000	3139000	14.6	6.67E+00	22.9	874	49.2	5.5
		34_6	347000	3139000	14.6	1.21E-01	9.1	533	32.0	0.3
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	35_1	342570	3082680	0.3	2.77E-01	9.1	541	5.2	0.9
		35_2	343870	3082690	0.0	6.28E+01	13.7	772	21.1	5.5
		35_3	343870	3082690	0.0	6.28E+01	13.7	772	21.1	5.5
		35_4	343870	3082690	0.0	6.28E+01	13.7	772	21.1	5.5
		35_5	343870	3082690	0.0	6.28E+01	13.7	772	21.1	5.5
		35_6	343870	3082690	0.0	1.41E+01	40.2	361	21.3	5.5
		35_7	343870	3082690	0.0	1.41E+01	40.2	361	21.3	5.5
		35_8	343870	3082690	0.0	1.41E+01	40.2	361	21.3	5.5
		35_9	343870	3082690	0.0	1.41E+01	40.2	361	21.3	5.5
		35_10[5]	343870	3082690	0.0	3.78E-02	5.0	ambient	5.0	0.0
		35_11[5]	343870	3082690	0.0	1.28E-03	5.0	ambient	5.0	0.0
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	36_1	336690	3098650	1.5	3.44E+01	16.8	727	28.4	4.6
		36_2	336660	3098660	1.5	3.44E+01	17.1	727	28.4	4.6
		36_3	336620	3098660	1.5	3.84E+01	16.8	727	28.4	4.6
		36_4	336580	3098660	1.4	3.84E+01	16.8	727	28.4	4.6
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	36_5	338860	3071480	0.4	2.83E+01	12.2	755	6.4	7.0
		36_6	338860	3071480	0.4	2.91E+01	12.2	755	6.4	7.0
		36_7	338860	3071480	0.4	2.69E+01	12.2	755	6.4	7.0
		36_8	338860	3071480	0.4	2.60E+01	12.2	755	6.4	7.0
1030117	PINELLAS COUNTY UTILITITES ADMIN.	37_1	335270	3084310	2.7	2.58E+01	50.3	405	21.8	2.6
		37_2	335270	3084310	2.7	2.58E+01	50.3	405	21.8	2.6
		37_3	335270	3084310	2.7	2.58E+01	50.3	405	21.8	2.6
		37_4[5]	335270	3084310	2.7	5.06E-04	4.6	ambient	5.0	0.1
		37_5[5]	335270	3084310	2.7	9.29E-04	4.6	ambient	5.0	0.1
		37_6[5]	335270	3084310	2.7	3.02E+00	5.0	ambient	5.0	0.1
		37_7[5]	335270	3084310	2.7	9.29E-04	4.6	ambient	5.0	0.1
		37_8[5]	335270	3084310	2.7	9.29E-04	4.6	ambient	5.0	0.1
		37_9[5]	335270	3084310	2.7	9.29E-04	4.6	ambient	5.0	0.1
		37_10[5]	335270	3084310	2.7	9.29E-04	4.6	ambient	5.0	0.1
1050003	LAKELAND ELECTRIC	38_1	409100	3102800	40.5	1.84E+01	9.4	700	30.8	3.6
		38_2	409100	3102800	40.5	1.84E+01	9.4	700	30.8	3.6
		38_3	409000	3102800	40.7	1.22E+01	47.2	522	26.1	4.9
1050004	LAKELAND ELECTRIC	39_1	409200	3106200	39.6	6.66E+01	45.7	409	24.7	2.7
		39_2	409100	3106300	41.1	1.09E+01	6.1	652	23.5	0.8
		39_3	409020	3106020	39.6	1.09E+01	6.1	652	23.5	0.8
		39_4	409200	3106400	41.7	2.81E+01	10.7	755	24.2	4.1
		39_5	409200	3106200	39.6	4.21E+01	47.9	409	22.3	3.2
		39_6	409300	3106300	39.6	3.21E+02	76.2	348	25.2	5.5
		39_7[5]	408790	3106860	41.7	1.04E-03	2.1	ambient	5.0	0.1
		39_8[5]	408790	3106860	41.7	5.05E-01	3.0	ambient	5.0	0.1
		39_9[5]	408790	3106860	41.7	1.93E-02	2.4	ambient	5.0	0.2
		39_10[5]	408790	3106860	41.7	2.86E-02	2.1	ambient	5.0	0.1
		39_11[5]	409000	3106800	42.6	2.08E+00	25.9	864	25.2	8.5
1050059	MOSAIC FERTILIZER LLC	66_1	396670	3079300	47.2	2.16E+00	61.0	350	15.2	2.6
		66_2	396670	3079300	47.2	2.16E+00	61.0	350	15.2	2.6
		66_3	396670	3079300	47.2	2.16E+00	61.0	350	15.2	2.6
		66_4	396670	3079300	47.2	1.76E+00	40.5	314	14.9	2.1
		66_5	396700	3079400	46.7	2.55E+00	52.4	327	20.2	2.4
		66_6	396670	3079300	47.2	1.83E+00	60.7	350	15.2	2.6
		66_7	396670	3079300	47.2	1.83E+00	60.7	350	15.2	2.6
		66_8	396670	3079300	47.2	1.59E+00	52.1	316	17.7	1.8
		66_9	396450	3079290	47.3	1.59E+00	52.1	316	17.7	1.8
		66_10	396670	3079300	47.2	8.85E-01	40.5	336	33.4	1.8
1050221	AUBURNDALE POWER PARTNERS, LP	63_1	420800	3103300	44.2	1.65E+01	48.8	368	16.8	5.5
		63_2	420800	3103300	44.2	1.65E+01	48.8	368	16.8	5.5
		63_3[3]	420800	3103300	44.2	1.32E+00	48.8	368	16.8	5.5
		63_4[3]	420800	3103300	44.2	0.00E+00	3.0	644	50.0	0.1
		63_5[3]	420800	3103300	44.2	0.00E+00	4.6	644	50.0	0.2
50223	FLORIDA POWER CORPDBA PROGRESS ENERGY FL	64_1	416250	3069370	48.0	1.22E+01	54.9	369	19.2	5.8
		64_2	416250	3069370	48.0	1.41E+00	54.9	369	19.2	5.8
		64_3	416250	3069370	48.0	8.16E+00	54.9	369	19.2	5.8
		64_4	416250	3069370	48.0	1.22E+01	54.9	369	19.2	5.8
		64_5	416250	3069370	48.0	1.22E+01	54.9	369	19.2	5.8
		64_6	416200	3069220	48.3	8.62E-01	12.2	433	11.8	1.2

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1050233	TAMPA ELECTRIC COMPANY	40_1	402440	3067360	41.8	8.36E+01	45.7	444	23.1	5.8
		40_2	402440	3067360	41.8	5.17E-01	22.9	464	15.2	1.1
		40_3	402440	3067360	41.8	2.81E-02	60.7	355	18.3	0.8
		40_4[1]	402440	3067360	41.8	8.80E-02	N/A	N/A	N/A	N/A
		40_5[5]	402440	3067360	41.8	1.78E-03	5.0	ambient	5.0	0.1
		40_6	402450	3067350	41.8	3.44E+00	34.7	876	18.3	8.8
		40_7	402450	3067350	41.8	3.44E+00	34.7	876	18.3	8.8
		40_8	402440	3067360	41.8	3.83E+00	34.7	876	47.8	5.5
		40_9	402440	3067360	41.8	3.83E+00	34.7	876	47.8	5.5
1050234	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	41_1	414170	3074100	48.8	2.20E+00	38.1	361	18.1	5.8
		41_2	414340	3073900	48.8	2.20E+00	38.1	361	18.1	5.8
		41_3[5]	414170	3074100	48.8	1.42E-01	6.7	ambient	5.0	0.6
		41_4[5]	414170	3074100	48.8	1.84E+01	3.0	ambient	5.0	0.2
		41_5	414400	3073900	48.8	3.88E+00	38.1	361	18.1	5.8
		41_6	414400	3073900	48.8	3.88E+00	38.1	361	18.1	5.8
		41_7	414400	3073900	48.8	3.06E+00	38.1	361	18.1	5.8
		41_8	414400	3073900	48.8	3.06E+00	38.1	361	18.1	5.8
		41_9	414170	3074100	48.8	3.16E+00	38.1	367	20.7	5.5
		41_10	414170	3074100	48.8	3.16E+00	38.1	367	20.7	5.5
7771101	WOODRUFF & SONS INC[2]	43_1	361885	3093420	5.6	1.63E-01	3.0	672	45.3	0.2
7775424	AJAX PAVING INDUSTRIES, INC.	56_1[3]	362810	3085710	1.5	2.56E-01	3.0	672	50.0	0.2
		56_2	362810	3085710	1.5	3.97E-01	12.2	383	13.4	1.2

Notes

[1]Volume source with side length = 10m, and release height of 5m

[2] Coordinates verified and changed in previous PSD permit application (October 2012)

[3] Modified source parameters (diesel engine)

[4] Modified source parameters (boiler/heater)

[5] Parameters filled in with conservative assumptions

Table 3.9
Screening of Neighboring Facilities for Increment Modeling
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID[1]	Company Name	Distance from EFT Centre (km)	Distance from EFT SIA (km)	Facility Total Longterm Emissions (tpy)	Screened In: Within 50 km of SIA and Longterm Emissions over 20D?	Included in the Model?
490003	THE MANCINI PACKING COMPANY	78.0	65.7	3.1	NO	NO
490015	HARDEE POWER PARTNERS LIMITED[2]	54.7	42.4	5116.2	YES	YES
490043	VANDOLAH POWER COMPANY, LLC	66.5	54.2	2016.0	NO	NO
490340	SEMINOLE ELECTRIC COOPERATIVE, INC.[2]	54.5	42.2	1289.0	YES	YES
490343	OLDCASTLE LAWN AND GARDEN INC	55.2	42.9	37.1	NO	NO
490344	MCBAR5, LLC	81.4	69.1	20.6	NO	NO
530004	CITRUS SERVICE, INC.	64.5	52.2	0.6	NO	NO
530010	CEMEX CONSTRUCTION MTLS FLORIDA, LLC	76.0	63.7	4305.6	NO	NO
530017	ER JAHNA INDUSTRIES INC	66.0	53.7	3.8	NO	NO
530017	ER JAHNA INDUSTRIES INC	66.0	53.7	31.2	NO	NO
530020	COLUMBIA REG MEDICAL CENTER OAK HILL	64.6	52.3	6.7	NO	NO
530021	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	68.3	56.0	11382.6	NO	NO
530031	TURNER FUNERAL HOMES INC	58.2	45.9	0.1	NO	NO
530032	CENTRAL POWER & LIME, INC.	68.8	56.5	13846.4	NO	NO
530038	PET CREMATION SERV.(FOSTER CREMATORY)	352.5	340.2	0.7	NO	NO
530039	FAMILY OWNED SERVICES CORP	64.1	51.8	0.0	NO	NO
530044	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	70.0	57.7	23.5	NO	NO
530050	FLORIDA ROCK INDUSTRIES, INC.	76.1	63.8	23.5	NO	NO
530351	GRUBBS CONSTRUCTION COMPANY	69.4	57.1	20.1	NO	NO
530357	D.A.B. CONSTRUCTORS INC	57.8	45.5	17.6	NO	NO
530362	GRUBBS CONSTRUCTION COMPANY	68.2	55.9	18.8	NO	NO
530365	HERNANDO COUNTY ANIMAL SERVICES	62.3	50.0	3.8	NO	NO
530366	ARIANA DAIRY FARMS, INC.	60.5	48.2	0.0	NO	NO
530367	MERRITT FUNERAL HOME	65.4	53.1	0.0	NO	NO
530372	HERNANDO CREMATORY INC	59.5	47.2	1.2	NO	NO
530376	TIMBERLINE ENERGY, LLC	79.5	67.2	32.2	NO	NO
530379	HERNANDO COUNTY BOCC	79.4	67.1	40.1	NO	NO
570001	JOHNSON CONTROLS BATTERY GROUP, INC	9.7	-2.6	3.3	YES	YES
570003	CF INDUSTRIES, INC.	6.9	-5.4	14.5	YES	YES
570005	CF INDUSTRIES, INC., PLANT CITY PHOS	32.6	20.3	362.4	NO	NO
570006	YUENGLING BREWING CO.	9.7	-2.6	54.1	YES	YES
570008	MOSAIC FERTILIZER, LLC1	11.4	-0.9	533.6	YES	YES
570010	CITY OF TAMPA WATER DEPARTMENT	16.9	4.6	0.0	NO	NO
570016	CITGO PETROLEUM CORPORATION	7.4	-4.9	19.7	YES	YES
570018	VULCAN MATERIALS CO / FLORIDA ROCK DIV.	7.0	-5.3	0.0	NO	NO
570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	6.2	-6.1	89.0	YES	YES
570022	MARATHON ASHLAND PETROLEUM LLC	6.9	-5.4	3.9	YES	YES
570024	KINDER MORGAN OLP "C"	6.8	-5.5	151.5	YES	YES
570025	TRADEMARK NITROGEN CORP	3.4	-8.9	75.1	YES	YES
570028	NEW NGC, INC.	18.9	6.6	185.3	YES	YES
570029	KINDER MORGAN PORT SUTTON TERMINAL, LLC	5.1	-7.2	333.7	YES	YES
570031	HOLCIM (US) INC.	8.2	-4.1	94.8	YES	NO[1]
570038	TAMPA ELECTRIC COMPANY	6.7	-5.6	11527.0	YES	YES
570039	TAMPA ELECTRIC COMPANY (TEC)[2]	18.9	6.6	50061.2	YES	YES
570040	TAMPA ELECTRIC COMPANY[2]	7.9	-4.4	1157.2	YES	YES
570041	FLORIDA HEALTH SCIENCES CTR, INC	8.2	-4.1	16.0	YES	YES
570054	SCRAP-ALL, INC.	4.8	-7.5	30.0	YES	YES
570055	CHEVRON U.S.A. INC.	19.5	7.2	5.8	NO	NO
570056	BUILDING MATERIALS MANUFACTURING CORP	6.9	-5.4	8.1	YES	YES
570061	TAMPA ARMATURE WORKS	2.5	-9.8	1.4	YES	YES
570065	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	16.8	4.5	0.0	NO	NO
570069	INDUSTRIAL GALVANIZERS AMERICA, INC.	4.1	-8.2	0.0	NO	NO
570072	BALL METAL BEVERAGE CONTAINER CORP.	9.9	-2.4	0.1	YES	YES
570075	CORONET INDUSTRIES, INC.	29.8	17.5	227.6	NO	NO
570076	APAC SOUTHEAST, INC. - CENTRAL FL. DIV.	14.1	1.8	192.4	YES	YES
570077	VERLITE COMPANY	4.0	-8.3	3.0	YES	YES
570080	MARATHON PETROLEUM COMPANY LP	5.1	-7.2	9.2	YES	YES
570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	7.7	-4.6	2.5	YES	YES

[redacted]ility ID[1]	Company Name	Distance from EFT Centre (km)	Distance from EFT SIA (km)	Facility Total Longterm Emissions (tpy)	Screened In: Within 50 km of SIA and Longterm Emissions over 20D?	Included in the Model?
570082	GULF SULPHUR SERVICES LTD., LLP	7.2	-5.1	0.0	NO	NO
570083	BUCKEYE TERMINALS, LLC	6.6	-5.7	0.0	YES	YES
570085	CENTRAL FLORIDA PIPELINE	7.8	-4.5	30.9	YES	YES
570087	CORESLAB STRUCTURES (TAMPA) INC	4.9	-7.4	0.0	NO	NO
570088	HALEY, JAMES A. VETERAN'S HOSPITAL TAMPA	11.3	-1.0	0.0	NO	NO
570089	ST. JOSEPH'S HOSPITAL	11.1	-1.2	109.1	YES	YES
570090	MASTER - HALCO, INC.	4.1	-8.2	7.0	YES	YES
570091	TERRA ASGROW	26.7	14.4	2.0	NO	NO
570092	KINDER MORGAN PORT SUTTON TERMINAL, LLC	7.0	-5.3	0.1	YES	YES
570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	4.8	-7.5	6.6	YES	YES
570099	SULPHURIC ACID TRADING COMPANY	19.5	7.2	0.0	NO	NO
570100	GULF SULPHUR SERVICES LTD., LLP	7.5	-4.8	0.0	NO	NO
570119	TRADEMARK METALS RECYCLING, LLC	0.6	-11.7	6.7	YES	YES
570123	HESS CORPORATION	22.0	9.7	5.2	NO	NO
570127	CITY OF TAMPA	4.2	-8.1	679.0	YES	YES
570136	VERLITE CO	4.4	-7.9	0.2	YES	YES
570141	US AIR FORCE (MACDILL AFB)	16.3	4.0	70.7	NO	NO
570150	CARMEUSE LIME & STONE, INC.	9.2	-3.1	0.0	NO	NO
570160	BALL METAL BEVERAGE CONTAINER CORP.	9.7	-2.6	24.7	YES	YES
570163	GRIFFIN INDUSTRIES	2.6	-9.7	0.0	NO	NO
570165	BAG-MOR	3.9	-8.4	0.0	NO	NO
570171	SPEEDLING, INC.	33.3	21.0	15.9	NO	NO
570180	CAST-CRETE CORPORATION	8.7	-3.6	0.0	NO	NO
570185	PREFERRED MATERIALS, INC.	4.4	-7.9	0.0	NO	NO
570197	MOTIVA ENTERPRISES LLC	20.2	7.9	0.0	NO	NO
570198	HILLSBOROUGH CREMATORY	13.5	1.2	0.0	NO	NO
570216	SOUTH BAY HOSPITAL	27.9	15.6	0.8	NO	NO
570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	4.3	-8.0	53.5	YES	YES
[redacted]0224	HARSCO MINERALS	8.5	-3.8	18.0	YES	YES
[redacted]70236	WESTSHORE GLASS CORP	15.7	3.4	2.0	NO	NO
570249	GOLDEN ALUMINUM EXTRUSION, LLC PLANT CIT	21.7	9.4	68.6	NO	NO
570252	CEMEX CONSTRUCTION MATERIALS FLORIDA,LLC	8.7	-3.6	8.6	YES	NO[1]
570254	VERTIS, INC.	15.7	3.4	4.5	NO	NO
570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.[2]	4.2	-8.1	1.4	YES	YES
570262	CHROMALLOY CASTINGS TAMPA, CORPORATION	16.4	4.1	13.7	NO	NO
570286	TAMPA SHIP, LLC	7.8	-4.5	188.0	YES	YES
570287	COL. MET., INC.	15.9	3.6	0.7	NO	NO
570290	E.A. MARIANI ASPHALT CO.	6.2	-6.1	2.2	YES	YES
570293	STAR PACKAGING CORPORATION	17.8	5.5	0.2	NO	NO
570295	ASHLAND INC.	19.6	7.3	0.0	NO	NO
570296	FCC ENVIRONMENTAL, LLC	25.2	12.9	21.6	NO	NO
570317	EAST BAY PROPERTY, INC.	8.5	-3.8	32.0	YES	NO[1]
570320	DART CONTAINER CORPORATION OF FLORIDA	21.2	8.9	32.4	NO	NO
570321	MANTUA MANUFACTURING CO.	1.4	-10.9	12.8	YES	YES
570324	TAMPA STEEL ERECTING COMPANY	5.0	-7.3	1.7	YES	YES
570342	ZIPPERER`S AGAPE MORTUARY & CREMATORY IN	29.1	16.8	0.0	NO	NO
570370	PARADISE, INC.	24.9	12.6	5.6	NO	NO
570373	CITY OF TAMPA-WASTEWATER DEPT.	4.3	-8.0	152.8	YES	YES
570378	HILLSBOROUGH RESOURCE RECOVERY, INC	5.7	-6.6	1.3	YES	YES
570408	AGRIUM U.S. INC.	7.9	-4.4	0.0	NO	NO
570409	CONIGLIO CONSTRUCTION AND DEMOLITION DEB	11.5	-0.8	48.6	YES	YES
570412	VULCAN MATERIALS COMPANY, FLORIDA ROCK D	8.5	-3.8	0.0	NO	NO
570415	NEBRASKA PRINTING COMPANY INC.	13.5	1.2	0.0	NO	NO
570417	EVERGREEN PACKAGING	28.1	15.8	0.7	NO	NO
570425	MANHEIM TAMPA DBA GREATR TB AUTO AUCTION	9.8	-2.5	0.0	NO	NO
570431	FLORIDA MORTUARY	7.4	-4.9	0.0	NO	NO
570434	TRANSFER-ONE, INC	1.8	-10.5	0.0	NO	NO
570436	BAY CITY SAND, INC.	2.6	-9.7	2.6	YES	YES
570437	NEWSPAPER PRINTING COMPANY, INC.	16.4	4.1	0.6	NO	NO
[redacted]70438	FLORIDA GAS TRANSMISSION COMPANY	30.6	18.3	44.6	NO	NO
[redacted]70442	GULF MARINE REPAIR/HENDRY CORPORATIONS	4.3	-8.0	142.9	YES	YES
570455	PASCO TERMINALS, INC.	8.4	-3.9	0.0	NO	NO
570459	BAUSCH & LOMB INCORPORATED	12.2	-0.1	18.0	YES	YES

ility ID[1]	Company Name	Distance from EFT Centre (km)	Distance from EFT SIA (km)	Facility Total Longterm Emissions (tpy)	Screened In: Within 50 km of SIA and Longterm Emissions over 20D?	Included in the Model?
570460	JAMES HARDIE BUILDING PRODUCTS, INC.	23.3	11.0	62.3	NO	NO
570461	BLACKLIDGE EMULSIONS INCORPORATED	4.7	-7.6	10.5	YES	YES
570468	GATSBY SPAS INC.	23.2	10.9	0.1	NO	NO
570474	T-R DRUM & FREIGHT CO.	31.8	19.5	3.4	NO	NO
570480	UNIVERSITY OF SOUTH FLORIDA (USF)	11.5	-0.8	16.9	YES	YES
570854	HILLSBOROUGH COUNTY SOLID WASTE MGT DEPT	28.6	16.3	50.2	NO	NO
571029	INTERNATIONAL PAPER COMPANY	27.2	14.9	9.0	NO	NO
571130	BRANDON REGIONAL MEDICAL CENTER	9.7	-2.6	0.0	YES	YES
571147	SMITHFIELD PACKING COMPANY, INC.	25.0	12.7	60.8	NO	NO
571151	INTERNATIONAL PAPER COMPANY	4.7	-7.6	10.2	YES	YES
571185	CARGILL, INC.	17.9	5.6	11.0	NO	NO
571205	STOROPACK, INC.	1.0	-11.3	0.0	NO	NO
571209	THE LANE CONSTRUCTION COMPANY	7.1	-5.2	24.1	YES	YES
571217	SEA 3 OF FLORIDA, INC.	7.8	-4.5	34.5	YES	YES
571240	CARGILL INC.- SALT DIVISION	5.6	-6.7	0.7	YES	YES
571242	NEW NGC, INC., D/B/A NATIONAL GYPSUM COM	18.2	5.9	96.3	NO	NO
571268	QWEST COMMUNICATIONS COMPANY LLC	3.6	-8.7	0.0	NO	NO
571269	H. LEE MOFFITT CANCER CENTER	11.9	-0.4	41.0	YES	YES
571279	FLORIDA GAS TRANSMISSION COMPANY	11.8	-0.5	49.9	YES	YES
571288	8001 LAND RECOVERY, LLC	9.8	-2.5	67.5	YES	NO[1]
571290	TITAN AMERICA, LLC	7.3	-5.0	215.3	YES	YES
571301	L.V. THOMPSON, INC. (TAMCO)	3.0	-9.3	8.3	YES	YES
571307	CEMEX CONSTRUCTION MATERIAL FLORIDA, LLC	7.8	-4.5	22.8	YES	NO[1]
571312	HENDRY CORPORATION	6.7	-5.6	0.1	YES	YES
571316	FLORIDA ENVIRONMENTAL RESOURCES CORP	3.3	-9.0	80.0	YES	NO[1]
571320	HILLSBOROUGH CO. WATER RESOURCE SERVICES	25.2	12.9	18.5	NO	NO
571321	PORT SUTTON ENVIROFUELS, LLC	7.0	-5.3	98.1	YES	NO[1]
571323	FARKAS LAND CLEARING & DEVELOPMENT	20.5	8.2	66.5	NO	NO
571326	SEPARATION TECHNOLOGIES, LLC	18.9	6.6	51.8	NO	NO
571328	ORION MARINE CONSTRUCTION, INC.	18.3	6.0	0.4	NO	NO
571337	TAMPA PAVEMENT CONSTRUCTORS, INC., A SUB	3.9	-8.4	28.0	YES	YES
571339	TRINITY MATERIALS, LLC	7.2	-5.1	115.4	YES	NO[1]
571342	BLACKLIDGE EMULSIONS, INC.	6.4	-5.9	1.2	YES	YES
571348	D.H. GRIFFIN WRECKING CO., INC.	51.7	39.4	0.0	NO	NO
571349	GEORGE BERNICO/PALLET SERVICES, INC	20.9	8.6	20.8	NO	NO
571361	SONNY GLASBRENNER, INC	18.6	6.3	57.6	NO	NO
571401	SEPARATION TECHNOLOGIES, LLC	8.3	-4.0	49.2	YES	NO[1]
571402	ANCHOR SANDBLASTING AND PAINTING, INC	5.3	-7.0	30.9	YES	YES
571408	CHROMALLOY CASTINGS, TAMPA CORP	16.4	4.1	11.9	NO	NO
571417	RIVERHAWK MARINE, LLC	17.3	5.0	0.0	NO	NO
571421	NEXLUBE TAMPA, LLC	7.1	-5.2	74.9	YES	NO[1]
571427	G&K SERVICES	16.4	4.1	3.5	NO	NO
571428	TLC PROPERTY MAINTENANCE, INC	30.7	18.4	12.4	NO	NO
810001	TRANSMONTAIGNE PRODUCT SERVICES, INC.	39.5	27.2	42.1	NO	NO
810002	PINEY POINT PHOSPHATES, INC.	39.2	26.9	168.6	NO	NO
810003	APAC FLORIDA, INC., SARASOTA DIV.	58.4	46.1	0.0	NO	NO
810007	TROPICANA MANUFACTURING COMPANY, INC.	55.2	42.9	572.9	NO	NO
810010	FLORIDA POWER & LIGHT (PMT)[2]	39.7	27.4	23147.3	YES	YES
810018	BISHOP ANIMAL SHELTER SPCA	58.3	46.0	0.0	NO	NO
810024	FLORIDA POWER & LIGHT COMPANY	40.2	27.9	17.2	NO	NO
810030	EATON AEROSPACE LLC	62.3	50.0	0.0	NO	NO
810030	EATON AEROSPACE LLC	62.5	50.2	4.0	NO	NO
810031	PIERCE MANUFACTURING	57.1	44.8	30.2	NO	NO
810039	TOALE BROTHERS FUNERAL HOME	60.1	47.8	0.2	NO	NO
810040	APAC-SOUTHEAST, INC., SARASOTA DIV.	63.8	51.5	1.2	NO	NO
810045	MANATEE CO BOARD OF CO COMMISSIONERS	50.5	38.2	3.0	NO	NO
810055	MANATEE COUNTY UTILITY OPERATIONS DEPT.	55.2	42.9	59.0	NO	NO
810063	AJAX PAVING INDUSTRIES, INC.	40.6	28.3	13.8	NO	NO
810067	ATLAS-TRANSOIL INTERNATIONAL, INC.	38.9	26.6	4.2	NO	NO
810069	PALMETTO FUNERAL HOME AND CREMATORY	52.5	40.2	0.2	NO	NO
810079	BENZ RESEARCH & DEVELOPMENT CORP.	61.4	49.1	0.5	NO	NO
810085	BELSPUR OAKS PET CREMATORY INC	60.3	48.0	0.1	NO	NO

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810087	SERVICE CORPORATION INTERNATIONAL	59.4	47.1	4.5	NO	NO
810090	STRATEGIC MATERIALS, INC.	61.4	49.1	0.0	NO	NO
810161	FREDERICK DERR & CO., INC.	63.9	51.6	0.4	NO	NO
810164	FLOWERS BAKING COMPANY OF BRADENTON, LLC	61.0	48.7	5.3	NO	NO
810174	ROCKTENN CP, LLC	55.7	43.4	2.4	NO	NO
810193	BRASOTA SERVICES INC	63.5	51.2	1.3	NO	NO
810194	CPV GULF COAST, LTD.	40.0	27.7	252.0	NO	NO
810198	ENERGY TRANSFER COMPANY/ETG	58.4	46.1	77.0	NO	NO
810199	EL PASO MERCHANT ENERGY COMPANY	39.2	26.9	386.9	NO	NO
810200	BROWN & SONS FUNERAL HOMES	56.4	44.1	1.2	NO	NO
810201	SUPERIOR ASPHALT, INC.	58.4	46.1	15.0	NO	NO
810213	UNITED STATES ENVIROFUELS, LLC	40.0	27.7	0.0	NO	NO
810215	GULFSTREAM NATURAL GAS SYSTEM, L.L.C.	39.9	27.6	119.6	NO	NO
810218	MYAKKA CITY TREE RECYCLING CENTER	73.1	60.8	0.0	NO	NO
810222	LAKE ST. CLAIRE MINING, LLC	65.5	53.2	14.7	NO	NO
810230	CDM, LLC	48.6	36.3	0.0	NO	NO
810232	RATIONAL ENERGIES MC INC.	61.6	49.3	7.3	NO	NO
810233	VECENERGY	41.0	28.7	26.9	NO	NO
1010002	VITALITY FOODSERVICE INC	49.5	37.2	1.2	NO	NO
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	47.0	34.7	1088.8	YES	YES
1010026	HCA NEW PORT RICHEY HOSPITAL	49.8	37.5	0.5	NO	NO
1010027	AJAX PAVING INDUSTRIES, INC.	34.8	22.5	11.1	NO	NO
1010028	OVERSTREET PAVING CO	50.6	38.3	45.1	NO	NO
1010041	APAC- SOUTHEAST, INC., CENTRAL FL. DIV	34.8	22.5	1.7	NO	NO
1010042	SCI FUNERAL SERVICES OF FLORIDA INC	51.7	39.4	8.8	NO	NO
1010043	OAKCREST PET CEMETARY	26.2	13.9	0.0	NO	NO
1010045	HODGES FAMILY FUNERAL HOME INC	44.5	32.2	4.4	NO	NO
1010051	PASCO COUNTY ANIMAL CONTROL	30.2	17.9	0.0	NO	NO
1010056	PASCO COUNTY[2]	48.4	36.1	1006.7	YES	YES
1010064	SUNBELT PUBLISHING CO.	49.9	37.6	0.0	NO	NO
1010070	CHAMPEAU STORAGE & RECYCLING	32.1	19.8	0.0	NO	NO
1010071	PASCO COGEN LIMITED[2]	49.5	37.2	422.4	NO	NO
1010327	COASTAL LANDFILL DISPOSAL OF FL, LLC	54.3	42.0	0.0	NO	NO
1010344	J.E. AUSLEY CONSTRUCTION INC	52.4	40.1	6.3	NO	NO
1010349	DOBIES FUNERAL HOME INC	51.3	39.0	0.0	NO	NO
1010360	KADUK FUNERAL SERVICES INC	42.4	30.1	0.0	NO	NO
1010364	B&T REBUILDERS DIV. OF CHAMPION PARTS	47.1	34.8	0.1	NO	NO
1010365	TRINITY MEMORIAL CEMETARY INC	34.5	22.2	0.0	NO	NO
1010371	GULF LINE, INC.	41.9	29.6	0.0	NO	NO
1010372	WE CARE CREMATORY	55.2	42.9	1.3	NO	NO
1010373	SHADY HILLS POWER COMPANY, L.L.C.[2]	48.0	35.7	1224.2	YES	YES
1010377	FOSTER'S PET CREMATION SERVICE	55.1	42.8	0.0	NO	NO
1010378	PAW MATERIALS, INC.	32.5	20.2	45.3	NO	NO
1010492	FAITHFUL FRIENDS PET CREMATION LLC	36.0	23.7	3.3	NO	NO
1010505	AGRI-SOURCE FUELS, LLC	49.6	37.3	6.6	NO	NO
1010508	FLORIDA WOOD RECYCLERS, INC.	32.4	20.1	0.0	NO	NO
1030004	APAC- SOUTHEAST, INC. -CENTRAL FL. DIV	31.2	18.9	0.6	NO	NO
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	24.3	12.0	10700.0	YES	YES
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	27.9	15.6	5063.8	YES	YES
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	33.7	21.4	3837.8	YES	YES
1030017	S. E. CEMETERIES OF FLORIDA, L.L.C.	37.7	25.4	4.6	NO	NO
1030018	PINELLAS CO BOARD OF CO COMMISSIONERS	43.3	31.0	3.1	NO	NO
1030020	SPCA TAMPA BAY	38.7	26.4	0.2	NO	NO
1030026	AJAX PAVING INDUSTRIES OF FLORIDA, LLC	38.2	25.9	48.4	NO	NO
1030034	LIFE SCIENCES	39.8	27.5	1.2	NO	NO
1030035	DIRECTORS SERVICE INC	33.5	21.2	1.8	NO	NO
1030037	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	28.0	15.7	0.0	NO	NO
1030044	SUNCOAST PAVING, INC.	44.6	32.3	26.5	NO	NO
1030045	CEMEX CONSTRUCTION MATERIALS FLORIDA LLC	34.1	21.8	0.0	NO	NO
1030047	SCI FUNERAL SERVICES OF FLORIDA INC	35.2	22.9	9.1	NO	NO
1030054	THE MINUTE MAID COMPANY	40.4	28.1	7.2	NO	NO
1030060	CITY OF LARGO - WWTP	32.2	19.9	6.2	NO	NO
1030061	TRADEMARK METALS RECYCLING LLC.	36.4	24.1	8.8	NO	NO

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1030070	MORTON PLANT MEASE HEALTH CARE	39.9	27.6	6.3	NO	NO
1030075	PREMIERE TRANSPORT & CREMATORY SERVICES	33.9	21.6	0.7	NO	NO
1030078	FLORIDA ROCK INDUSTRIES INC	30.0	17.7	0.0	NO	NO
1030091	MORTON PLANT MEASE HEALTH CARE	41.2	28.9	80.0	NO	NO
1030095	BAYFRONT MEDICAL CENTER	33.9	21.6	17.7	NO	NO
1030098	ESSILOR OF AMERICA, INC.	40.0	27.7	0.0	NO	NO
1030112	CATALENT PHARMA SOLUTIONS, LLC	29.8	17.5	11.2	NO	NO
1030113	DAVIS CONCRETE, INC.	40.5	28.2	0.0	NO	NO
1030114	MI METALS, INC.	29.1	16.8	12.1	NO	NO
1030117	PINELLAS COUNTY UTILITITES ADMIN.	30.4	18.1	2802.7	YES	YES
1030118	SCHNELLER LLC	33.3	21.0	0.3	NO	NO
1030119	MADICO WINDOW FILMS, INC.	36.0	23.7	1.5	NO	NO
1030127	METAL CULVERTS, INC.	35.3	23.0	1.3	NO	NO
1030129	PINELLAS PET MEM'L GDNS & CREMATION SVCS	36.3	24.0	0.9	NO	NO
1030131	ANDERSON-MCQUEEN FUNERAL HOME	42.4	30.1	0.0	NO	NO
1030132	SPECTRA METAL SALES, INC.	33.7	21.4	9.2	NO	NO
1030136	PET ANGEL WORLD SERVICES LLC	36.1	23.8	0.1	NO	NO
1030140	METAL INDUSTRIES, INC.	42.0	29.7	0.6	NO	NO
1030147	SONNY GLASBRENNER, INC.	30.9	18.6	46.2	NO	NO
1030148	SUN N FUN PRINTING CO.,INC.	32.6	20.3	0.2	NO	NO
1030153	HOWCO ENVIRONMENTAL SERVICES, INC.	37.9	25.6	7.7	NO	NO
1030157	FEDERAL HEATH SIGN COMPANY	28.5	16.2	0.1	NO	NO
1030165	JACOBSEN MANUFACTURING, INC.	31.3	19.0	0.0	NO	NO
1030166	IRWIN YACHT & MARINE CORP.	32.4	20.1	0.0	NO	NO
1030172	WATKINS YACHT, INC.	32.4	20.1	0.0	NO	NO
1030175	GAGNE WALLCOVERINGS	36.5	24.2	0.0	NO	NO
1030180	INTERPRINT, INC.	30.4	18.1	0.2	NO	NO
1030192	R.R. DONNELLEY & SONS COMPANY	41.1	28.8	0.0	NO	NO
030210	MEDICO ENVIRONMENTAL SERVICES, INC.	33.7	21.4	56.1	NO	NO
030214	LIFE-LIKE ACQUISITIONS, INC.	39.6	27.3	6.8	NO	NO
1030217	ETERNAL REST MEMORIES FUNERAL HOME	36.8	24.5	1.7	NO	NO
1030218	M C GRAPHICS, INC., DBA, SANDY ALEXANDER	28.9	16.6	1.1	NO	NO
1030227	CITY OF CLEARWATER	32.0	19.7	0.0	NO	NO
1030228	CITY OF CLEARWATER	40.0	27.7	0.0	NO	NO
1030229	CITY OF CLEARWATER	32.6	20.3	0.0	NO	NO
1030230	CITY OF DUNEDIN	38.1	25.8	0.0	NO	NO
1030231	CITY OF LARGO	32.3	20.0	0.0	NO	NO
1030232	PINELLAS COUNTY GOVERNMENT	46.5	34.2	0.0	NO	NO
1030233	PINELLAS COUNTY GOVERNMENT	42.4	30.1	0.0	NO	NO
1030234	PINELLAS COUNTY GOVERNMENT	38.7	26.4	8.8	NO	NO
1030235	CITY OF ST. PETERSBURG	33.0	20.7	0.0	NO	NO
1030236	CITY OF ST. PETERSBURG	27.9	15.6	0.0	NO	NO
1030237	CITY OF ST. PETERSBURG	40.2	27.9	0.0	NO	NO
1030238	CITY OF ST. PETERSBURG	40.6	28.3	0.0	NO	NO
1030240	COX TARGET MEDIA, INC.	38.2	25.9	0.1	NO	NO
1030245	DEPARTMENT OF NATURAL RESOURCES - FMRI	40.3	28.0	0.0	NO	NO
1030248	NEW YORK DRY CLEANERS & TAILORS	42.1	29.8	0.1	NO	NO
1030282	ANDERSON-MCQUEEN FUNERAL HOME	40.1	27.8	2.3	NO	NO
1030288	BAY LINEN, INC.	32.3	20.0	14.3	NO	NO
1030356	PARAGON MACHINE COMPANY, INC.	32.1	19.8	0.1	NO	NO
1030443	LORAD CHEMICAL CORPORATION	33.8	21.5	2.4	NO	NO
1030473	LIGHTHOUSE FUNERAL SERVICES, LLC	30.6	18.3	2.2	NO	NO
1030477	ANGELO'S RECYCLED MATERIALS, INC.	38.9	26.6	0.0	NO	NO
1030488	AAA PRINTING INC	36.0	23.7	0.0	NO	NO
1030496	CLEARWATER CYLINDER HEAD, INC.	32.8	20.5	0.4	NO	NO
1030509	COX TARGET MEDIA, INC.	30.1	17.8	10.6	NO	NO
1030512	VETERANS FUNERAL CARE	32.3	20.0	0.7	NO	NO
1030516	GEE & SORENSEN FUNERAL HOME & CREMATION	34.3	22.0	2.0	NO	NO
1030527	GULFSTREAM NATURAL GAS, L.L.C.	24.3	12.0	0.0	NO	NO
1050001	CITROSUCO NORTH AMERICA, INC.	87.9	75.6	79.7	NO	NO
050002	CITRUS WORLD, INC.	77.0	64.7	434.6	NO	NO
1050003	LAKELAND ELECTRIC[2]	45.8	33.5	1703.0	YES	YES
1050004	LAKELAND ELECTRIC[2]	46.7	34.4	16772.6	YES	YES

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1050007	OWENS-BROCKWAY GLASS CONTAINER INC.	42.7	30.4	497.2	NO	NO
1050009	FLORIDA TILE INDUSTRIES, INC.	42.1	29.8	30.1	NO	NO
1050014	STANDARD SAND & SILICA CO	81.7	69.4	37.2	NO	NO
1050015	US BEVERAGE PACKING LAKELAND PLANT	35.9	23.6	20.8	NO	NO
1050019	CARGILL JUICE NORTH AMERICA, INC.	87.5	75.2	336.7	NO	NO
1050021	ASHLAND INC.	48.0	35.7	4.8	NO	NO
1050022	PACKAGING CORPORATION OF AMERICA	59.9	47.6	5.9	NO	NO
1050023	CUTRALE CITRUS JUICES USA,INC	58.1	45.8	109.2	NO	NO
1050026	ALCOA WORLD ALUMINA, L.L.C.	58.0	45.7	100.1	NO	NO
1050029	HUNT BROTHERS COOPERATIVE, INC.	81.9	69.6	1.0	NO	NO
1050032	NORTH LAKELAND RECYCLING, INC.	44.4	32.1	0.0	NO	NO
1050034	MOSAIC FERTILIZER LLC	45.5	33.2	0.0	NO	NO
1050037	ALL-TEMP STORAGE, LLC	58.5	46.2	91.3	NO	NO
1050041	LAKE GARFIELD CITRUS CO-OP	61.7	49.4	0.0	NO	NO
1050043	PEACE RIVER PACKING CO	62.0	49.7	1.0	NO	NO
1050045	BARTOW CITRUS PRODUCTS, LLC.	55.5	43.2	7.0	NO	NO
1050046	MOSAIC FERTILIZER, LLC	46.1	33.8	227.3	NO	NO
1050047	AGRIFOS MINING, L.L.C.	35.2	22.9	311.0	NO	NO
1050048	MOSAIC FERTILIZER, LLC	44.7	32.4	151.1	NO	NO
1050050	U S AGRI-CHEMICALS CORP.	49.6	37.3	12.6	NO	NO
1050051	U.S. AGRI-CHEMICALS CORPORATION	58.2	45.9	344.6	NO	NO
1050052	CF INDUSTRIES, INC.	45.6	33.3	13.1	NO	NO
1050053	MOSAIC FERTILIZER, LLC	47.4	35.1	286.5	NO	NO
1050055	MOSAIC FERTILIZER LLC	48.9	36.6	215.0	NO	NO
1050056	CD GLOBAL	39.3	27.0	61.5	NO	NO
1050057	IMC PHOSPHATES COMPANY	35.6	23.3	87.4	NO	NO
1050059	MOSAIC FERTILIZER LLC[2]	35.6	23.3	643.0	YES	YES
1050061	HOLLY HILL FRUIT PRODUCTS	79.8	67.5	5.1	NO	NO
1050072	WINTER HAVEN HOSPITAL	65.6	53.3	11.2	NO	NO
1050076	INTERNATIONAL PAPER COMPANY	58.7	46.4	20.9	NO	NO
1050081	THE QUIKRETE COMPANIES, INC.	47.7	35.4	7.4	NO	NO
1050082	APAC-SOUTHEAST, INC., CENTRAL FL. DIV.	60.7	48.4	5.6	NO	NO
1050090	CARIBBEAN DISTILLERS LLC	66.5	54.2	29.3	NO	NO
1050095	LAKELAND REGIONAL MEDICAL CENTER	44.0	31.7	98.7	NO	NO
1050096	CARIBBEAN DISTILLERS LLC	58.0	45.7	26.8	NO	NO
1050097	ARRMAZ CUSTOM CHEMICALS	44.9	32.6	12.2	NO	NO
1050099	AOC, L.L.C.	39.8	27.5	39.5	NO	NO
1050100	MOMENTIVE SPECIALTY CHEMICALS, INC.	46.8	34.5	8.5	NO	NO
1050106	CITRUS WORLD, INC.	57.9	45.6	27.2	NO	NO
1050113	STANDARD SAND & SILICA COMPANY	87.9	75.6	1.0	NO	NO
1050125	LHOIST NORTH AMERICA OF ALABAMA	34.5	22.2	21.8	NO	NO
1050127	JUICE BOWL PRODUCTS	45.7	33.4	124.0	NO	NO
1050134	HEATH FUNERAL CHAPEL INC	43.8	31.5	1.8	NO	NO
1050139	SCHWARZ PARTNERS	38.3	26.0	0.0	NO	NO
1050142	DSE, INC	59.6	47.3	0.0	NO	NO
1050145	BARTOW ETHANOL OF FLORIDA, L.C.	55.5	43.2	21.8	NO	NO
1050146	PAVEX CORP DBA RANGER CONSTRUCTION-SOUTH	49.4	37.1	6656.1	YES	YES
1050148	FLANDERS ELECTRIC MOTOR SERVICE, INC	46.8	34.5	1.3	NO	NO
1050151	CENTRAL FLORIDA HOT MIX, A DIV. OF LANE	48.5	36.2	27.8	NO	NO
1050158	HIGH PERFORMANCE SYSTEMS, INC.	63.9	51.6	1.0	NO	NO
1050169	METALCOAT INC OF FLORIDA	40.9	28.6	2.5	NO	NO
1050174	PEPPERIDGE FARM, INC	41.3	29.0	23.1	NO	NO
1050175	GREIF PACKAGING LLC	59.3	47.0	0.0	NO	NO
1050179	FOUNDATION PARTNERS OF FLORIDA LLC	59.3	47.0	0.0	NO	NO
1050182	GEOLOGIC RECOVERY SYSTEMS	37.9	25.6	69.8	NO	NO
1050192	CARPENTER CO., INSULATION DIVISION	33.7	21.4	0.0	NO	NO
1050194	WOOD WASTE RECYCLING, INC.	35.7	23.4	0.0	NO	NO
1050196	O. K. WEST & SON	48.3	36.0	0.0	NO	NO
1050199	VIGIRON	59.2	46.9	0.0	NO	NO
1050200	SUPERMAG, L.C.	41.9	29.6	1.3	NO	NO
1050208	INDUSTRIAL CONTAINER SERV-LAKELAND, LLC	55.5	43.2	2.0	NO	NO
1050209	FLORIDA TREATT, INC.	72.3	60.0	0.0	NO	NO
1050210	AMERICOAT CORPORATION	47.3	35.0	0.0	NO	NO

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1050212	FLORIDA GAS TRANSMISSION COMPANY	48.7	36.4	0.0	NO	NO
1050215	WOOD MULCH PRODUCTS, INC.	49.7	37.4	56.3	NO	NO
1050216	WHEELABRATOR RIDGE ENERGY INC.	53.0	40.7	394.4	NO	NO
1050217	POLK POWER PARTNERS, L.P.[2]	51.2	38.9	67.4	NO	NO
1050221	AUBURNDALE POWER PARTNERS, LP	57.4	45.1	1193.6	YES	YES
1050223	FLORIDA POWER CORPDBA PROGRESS ENERGY FL	57.5	45.2	1639.8	YES	YES
1050227	CENTRAL FLORIDA CREMATORY OF POLK COUNTY	43.0	30.7	0.0	NO	NO
1050228	SADLER DRUM COMPANY	32.4	20.1	0.0	NO	NO
1050229	PARALLEL PRODUCTS OF FLORIDA, INC.	51.4	39.1	3.2	NO	NO
1050231	ORANGE COGENERATION LIMITED PARTNERSHIP	55.6	43.3	444.9	NO	NO
1050233	TAMPA ELECTRIC COMPANY[2]	46.5	34.2	3436.5	YES	YES
1050234	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA[2]	53.8	41.5	1499.3	YES	YES
1050239	CARLISLE CONSTRUCTION MATERIALS, INC.	34.8	22.5	0.0	NO	NO
1050240	INTERNATIONAL BEVERAGE SYSTEMS, INC.	34.0	21.7	5.1	NO	NO
1050246	ENVIRO-RECYCLING, INC.	44.1	31.8	0.0	NO	NO
1050255	AVON PARK CORRECTIONAL INSTITUTE	106.2	93.9	11.0	NO	NO
1050257	PANDA-KATHLEEN, L.P.	35.3	23.0	549.0	YES	NO[1]
1050263	POLK CORRECTIONAL INSTITUTION	63.7	51.4	9.7	NO	NO
1050272	SERVICE CORPORATION INTERNATIONAL	56.2	43.9	2.0	NO	NO
1050276	AERCON FLORIDA, LLC	77.5	65.2	0.0	NO	NO
1050297	POLK CO SHERIFF'S OFFICE	54.4	42.1	0.4	NO	NO
1050298	POLK CO BOARD OF COUNTY COMMISSIONERS -	52.9	40.6	88.3	NO	NO
1050312	MASTER CONTAINERS, INC.	40.8	28.5	15.8	NO	NO
1050319	CLARK ENVIRONMENTAL INC	39.6	27.3	99.0	NO	NO
1050320	KEYMARK CORP OF FLORIDA	39.9	27.6	17.8	NO	NO
1050323	J L LOCKE & COMPANY CREMATION SERVICES	79.5	67.2	1.8	NO	NO
1050325	SOUTHERN BAKERIES, INC.	40.9	28.6	0.0	NO	NO
[redacted]050330	FORT MEADE FOREST PRODUCTS	47.1	34.8	9.7	NO	NO
[redacted]050334	CALPINE CONSTRUCTION FINANCE COMPANY, LP	57.6	45.3	779.0	NO	NO
1050336	PEACE RIVER STATION, LLC	60.4	48.1	0.0	NO	NO
1050341	TURNER COATINGS INC.	39.0	26.7	10.7	NO	NO
1050342	ROYAL DRUM COMPANY, INC	60.4	48.1	2.0	NO	NO
1050343	ORGANIC MATTERS INC	56.1	43.8	0.3	NO	NO
1050349	CPV PIERCE, LTC.	44.9	32.6	195.9	NO	NO
1050352	LAKELAND ELECTRIC[2]	36.6	24.3	262.0	NO	NO
1050360	ACORN DEVELOPMENT GROUP	41.2	28.9	2.5	NO	NO
1050363	OAKLEY TRANSPORT, INC.	79.8	67.5	17.0	NO	NO
1050366	COCA-COLA N. AMERICA (WAS MINUTE MAID)	59.4	47.1	44.1	NO	NO
1050369	MORGAN TRUCK BODY, LLC	50.3	38.0	1.7	NO	NO
1050375	OWENS CORNING INSULATING SYSTEMS, LLC	41.0	28.7	4.2	NO	NO
1050377	BONSAL AMERICAN, INC.	57.5	45.2	8.1	NO	NO
1050380	CELLYNNE HOLDINGS, INC.	76.9	64.6	55.6	NO	NO
1050383	C.C. CALHOUN, INC.	77.8	65.5	0.0	NO	NO
1050387	GENERAL ASPHALT OF LAKELAND, LLC	50.5	38.2	35.0	NO	NO
1050394	LASTING PAWS PET CREMATION INC	40.0	27.7	2.5	NO	NO
1050395	TBEI, INC.	34.5	22.2	0.0	NO	NO
1050397	OLDCASTLE LAWN AND GARDEN, INC.	75.7	63.4	37.1	NO	NO
1050400	THE LANE CONSTRUCTION CORPORATION	41.4	29.1	16.5	NO	NO
1050408	CLEAN FUEL LAKELAND, LLC	40.8	28.5	11.9	NO	NO
1050413	BS RANCH & FARM, INC.	50.3	38.0	17.9	NO	NO
1050415	DRUM RECYCLERS, INC.	60.4	48.1	9.0	NO	NO
1050418	MIZKAN AMERICAS, INC.	66.5	54.2	5.5	NO	NO
1050420	TRAILER REBUILDERS, INC.	74.7	62.4	0.0	NO	NO
1050422	GTECH PRINTING CORP.	35.7	23.4	1.4	NO	NO
1050424	PROCESS WATER SOLUTIONS, LLC.	57.4	45.1	12.8	NO	NO
1050429	RICK HOLBORN EXCAVATION, INC.	79.5	67.2	0.0	NO	NO
1050431	JUICE BOWL PRODUCTS, INC.	45.7	33.4	14.7	NO	NO
1050444	U.S. ECOGEN POLK, LLC	64.4	52.1	246.0	NO	NO
7770029	KLEENSOIL INTERNATIONAL INC.	310.8	298.5	1.0	NO	NO
[redacted]770048	BETTER ROADS, INC.	144.2	131.9	19.0	NO	NO
7770073	APAC-SOUTHEAST INC.	31.2	18.9	43.4	NO	NO
7770179	ANGELO'S RECYCLED MATERIALS, INC.	14.3	2.0	28.5	NO	NO
7770262	ANGELO'S AGGREGATE MATERIALS	38.7	26.4	42.8	NO	NO

ility ID[1]	Company Name	Distance from EFT Centre (km)	Distance from EFT SIA (km)	Facility Total Longterm Emissions (tpy)	Screened In: Within 50 km of SIA and Longterm Emissions over 20D?	Included in the Model?
7770380	FLORIDA SOIL CEMENT LLC	36.4	24.1	12.3	NO	NO
7770420	PAW MATERIALS, INC.	32.4	20.1	9.4	NO	NO
7771101	WOODRUFF & SONS INC	2.3	-10.0	5.7	YES	YES
7774801	FLORIDA SOIL CEMENT LLC	5.9	-6.4	0.0	NO	NO
7774804	THE LANE CONSTRUCTION CORPORATION	48.5	36.2	33.4	NO	NO
7775047	FLORIDA POWER CORPORATION D/B/A PROGRESS	3115.1	3102.8	0.0	NO	NO
7775048	SONNY GLASBRENNER, INC.	30.9	18.6	25.4	NO	NO
7775052	WOODRUFF & SONS INC	61.0	48.7	5.7	NO	NO
7775053	WOODRUFF & SONS, INC.	61.1	48.8	5.7	NO	NO
7775089	WOODRUFF & SONS INC	61.0	48.7	1.6	NO	NO
7775202	THE LANE CONSTRUCTION CORPORATION	42.6	30.3	83.7	NO	NO
7775229	CRUSH-IT INC	172.7	160.4	0.0	NO	NO
7775280	APAC-SOUTHEAST, INC.	60.1	47.8	15.4	NO	NO
7775300	WOODRUFF AND SONS INC	41.0	28.7	0.0	NO	NO
7775345	JVS CONTRACTING INC	38.6	26.3	0.0	NO	NO
7775350	THE LANE CONSTRUCTION CORPORATION	41.8	29.5	13.8	NO	NO
7775424	AJAX PAVING INDUSTRIES, INC.	8.2	-4.1	22.7	YES	YES
7775438	DGP&S CONSTRUCTION INC	7.6	-4.7	0.0	NO	NO
7775551	THE LANE CONSTRUCTION CORPORATION	8.2	-4.1	83.7	YES	NO[1]

Notes:

[1] Excluded from modeling; no actual emission rate for any of the Eus.

[2] Emission rates reflect the total facility emission rate after EU duplicates were removed

Table 3.10
Summary of Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
490015	HARDEE POWER PARTNERS LIMITED	1_1	404930	3057290	35.3	1.52E+00	27.4	386	23.6	4.4
		1_2	404930	3057290	35.3	6.50E-01	27.4	391	23.1	4.4
		1_3	404930	3057290	35.3	2.30E-02	22.9	803	28.7	5.5
		1_4	404800	3057400	35.1	5.75E-03	25.9	810	43.3	4.5
490340	SEMINOLE ELECTRIC COOPERATIVE, INC.	2_1	405100	3057750	36.6	3.45E+00	53.3	365	2.0	5.5
		2_2	405100	3057750	36.6	4.07E+00	53.3	365	2.0	5.5
		2_3	405100	3057750	36.6	7.85E-01	18.3	750	30.8	2.9
		2_4	405100	3057750	36.6	8.49E-01	18.3	750	30.8	2.9
		2_5	405100	3057750	36.6	4.61E-01	18.3	750	30.8	2.9
		2_6	405100	3057750	36.6	4.16E-01	18.3	750	30.8	2.9
		2_7	405100	3057750	36.6	5.45E-01	18.3	750	30.8	2.9
570001	JOHNSON CONTROLS BATTERY GROUP, INC	45_1	359900	3102500	13.5	-3.91E-03	10.1	308	20.7	0.8
		45_2[5]	359900	3102500	13.5	-1.79E-02	15.2	505	6.7	0.9
570003	CF INDUSTRIES, INC.	3_1[5]	358100	3090400	1.5	7.96E-02	5.0	533	5.0	1.0
570006	YUENGLING BREWING CO.	46_1	362000	3103200	21.4	-3.79E-02	27.4	408	2.1	2.0
		46_2[4]	362000	3103200	21.4	-1.17E-01	19.8	408	20.0	1.2
570008	MOSAIC FERTILIZER, LLC	4_1	364590	3082380	0.0	1.64E+00	45.7	340	13.4	2.3
		4_2	363300	3082400	0.7	1.23E+00	45.7	340	10.4	2.4
		4_3	364590	3082380	0.0	1.41E+00	45.7	350	12.7	2.7
		4_4	364590	3082380	0.0	1.27E-01	38.4	329	11.3	2.4
		4_5	364590	3082380	0.0	2.44E-04	6.1	489	15.8	1.2
		4_6	362900	3082500	1.5	1.87E-01	40.5	315	15.2	2.1
		4_7[1]	363000	3082300	0.0	2.87E-03	N/A	N/A	N/A	N/A
		4_8[5]	364590	3082380	0.0	5.45E-02	38.1	339	17.1	1.8
		4_9	364590	3082380	0.0	9.79E-02	38.1	339	17.1	1.8
		4_10	362060	3082040	0.6	-8.24E-03	40.5	322	14.6	2.2
		4_11	362060	3082040	0.6	-6.78E-03	40.5	322	15.8	2.1
		4_12	364590	3082380	0.0	-1.14E-03	12.2	322	12.1	0.5
		4_13[5]	363000	3082300	0.0	-1.72E-02	12.2	322	12.1	0.5
		4_14	364590	3082380	0.0	-9.06E-04	21.3	350	19.7	0.8
		4_15	364590	3082380	0.0	-1.15E-03	21.3	350	19.7	0.8
		4_16	364590	3082380	0.0	-1.44E-04	21.3	347	14.4	0.9
570016	CITGO PETROLEUM CORPORATION	85_1	357600	3090400	0.0	1.50E-01	4.6	922	7.0	0.4
		85_2[3]	358040	3090620	1.5	1.58E-03	1.8	672	20.0	0.2
570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	5_1[5]	358030	3092750	0.0	1.80E-01	5.0	672	45.3	0.2
570022	MARATHON ASHLAND PETROLEUM LLC	47_1	362200	3087200	1.5	-3.59E-02	22.9	561	1.2	1.1
		47_2	362200	3087200	1.5	-5.32E-02	3.0	577	6.5	0.5
570024	KINDER MORGAN OLP "C"	6_1[5]	361480	3087490	1.0	9.92E-03	5.0	672	5.0	0.1
		6_2[5]	361480	3087490	1.0	5.92E-03	5.0	672	5.0	0.1
		6_3	360100	3087500	0.9	-3.35E-01	19.8	339		2.4
570025	TRADEMARK NITROGEN CORP	7_1	367300	3092600	7.6	1.55E+00	15.2	450	32.9	0.5
570028	NEW NGC, INC.	86_1	348830	3082690	1.5	1.68E-03	12.8	450	18.0	0.3
		86_2	348830	3082690	1.5	2.41E-03	12.8	450	18.9	0.3
		86_3	348830	3082690	1.5	4.47E-03	12.8	450	20.7	0.3
		86_4	348830	3082690	1.5	3.58E-03	12.8	450	18.6	0.3
		86_5	347300	3082700	1.2	4.40E-02	12.8	450	21.6	0.3
		86_6	347300	3082700	1.2	6.01E-02	12.8	450	21.6	0.3
		86_7	347300	3082700	1.2	6.15E-02	12.8	450	21.6	0.3
		86_8	347300	3082700	1.2	6.84E-02	12.8	450	21.6	0.3
		86_9	347300	3082700	1.2	4.22E-01	14.3	427	20.4	0.8
		86_10	348830	3082690	1.5	1.42E-02	19.5	358	11.8	1.1
		86_11[5]	348830	3082690	1.5	1.45E-01	10.7	422	20.4	0.9
		86_12	347300	3082700	1.2	7.01E-02	12.8	450	21.9	0.3
		86_13	347300	3082700	1.2	7.10E-02	12.8	450	21.9	0.3
		86_14	347300	3082700	1.2	4.12E-02	27.4	366	13.6	1.2
		86_15	348830	3082690	1.5	3.74E-02	27.4	366	23.0	0.9
570029	KINDER MORGAN PORT SUTTON TERMINAL, LLC	48_1	362500	3089000	3.1	-6.11E-02	9.1	400	10.7	1.4
		48_2	362500	3089000	3.1	-7.82E-02	9.1	505	10.7	1.4
		48_3	362500	3089000	3.1	-3.76E+00	16.8	394	36.9	0.8
		48_4	362500	3089000	3.1	-2.59E-04	2.7	400	7.3	0.5

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
570038	TAMPA ELECTRIC COMPANY	49_1	358000	3091000	0.6	-8.62E-01	85.3	453	25.0	3.4
		49_2	358000	3091000	0.6	-3.45E-03	85.3	453	25.0	3.4
		49_3	358000	3091000	0.6	-1.18E-02	85.3	445	19.1	3.7
		49_4	358000	3091000	0.6	-3.59E-02	85.3	445	19.1	3.7
		49_5	358000	3091000	0.6	-3.79E-02	85.3	453	25.0	3.4
		49_6	358000	3091000	0.6	-2.15E+00	85.3	438	22.9	2.9
		49_7	358000	3091000	0.6	-2.87E+00	4.3	704	205.4	0.2
570039	TAMPA ELECTRIC COMPANY (TEC)	8_1	361716	3075060	0.0	3.71E+01	149.4	419	35.3	7.3
		8_2	361720	3074980	0.0	2.34E+01	149.4	325	26.7	7.3
		8_3	361820	3075060	0.0	3.79E+01	149.4	426	15.6	7.3
		8_4	361820	3075040	0.1	3.46E+01	149.4	326	18.1	7.3
		8_5	361900	3075000	0.3	5.46E-02	18.3	751	30.9	2.9
		8_6	361900	3075000	0.3	4.89E-02	18.3	751	30.9	2.9
		8_7	363150	3074910	2.1	3.71E-03	4.6	786	87.1	0.2
		8_8[3]	363150	3074910	2.1	4.95E-03	0.9	298	14.0	0.1
		8_9	363150	3074910	2.1	-1.23E-02	22.9	771	18.6	4.3
		8_10	363150	3074910	2.1	-2.36E-02	22.9	771	18.6	4.3
570040	TAMPA ELECTRIC COMPANY	9_1	360010	3087490	0.0	1.22E+00	45.7	373	18.3	5.8
		9_2	360010	3087490	0.0	1.52E+00	45.7	373	18.3	5.8
		9_3	360010	3087490	0.0	1.83E+00	45.7	373	18.3	5.8
		9_4	360010	3087490	0.0	1.94E+00	45.7	373	18.3	5.8
		9_5	360010	3087490	0.0	1.88E+00	45.7	373	18.3	5.8
		9_6	360010	3087490	0.0	1.99E+00	45.7	373	18.3	5.8
		9_7	360010	3087490	0.0	2.10E+00	45.7	373	18.3	5.8
		9_8	360000	3087500	0.0	8.91E-02	18.3	751	30.9	2.9
		9_9	360000	3087500	0.0	9.12E-02	18.3	751	30.9	2.9
		9_10	360000	3087500	0.0	1.03E-01	18.3	751	30.9	2.9
		9_11	360000	3087500	0.0	1.07E-01	18.3	751	30.9	2.9
		9_12	360000	3087500	0.0	1.07E-01	18.3	751	30.9	2.9
		9_13	360000	3087500	0.0	1.07E-01	18.3	751	30.9	2.9
		9_14	360000	3087500	0.0	6.29E-02	18.3	751	30.9	2.9
		9_15	360000	3087500	0.0	6.54E-02	18.3	751	30.9	2.9
		9_16	360000	3087500	0.0	5.01E-03	4.6	786	87.1	0.2
		9_17	360000	3087500	0.0	-2.30E+01	96.0	416	28.7	3.0
		9_18	360000	3087500	0.0	-2.33E+01	96.0	421	30.8	3.0
		9_19	360000	3087500	0.0	-1.03E+02	96.0	420	38.4	3.2
		9_20	360100	3087500	0.9	-7.86E+01	96.0	427	22.9	3.0
		9_21	360000	3087500	0.0	-7.01E+00	96.0	424	23.2	4.5
		9_22	360000	3087500	0.0	-1.21E+02	96.0	433	24.7	5.4
		9_23	360000	3087500	0.0	-3.83E-01	10.7	816	28.2	3.4
570041	FLORIDA HEALTH SCIENCES CTR, INC	73_1[4]	356400	3091000	0.3	4.54E-03	36.6	300	10.0	1.8
		73_2[4]	356400	3091000	0.3	7.91E-03	36.6	477	10.0	0.9
		73_3[4]	356400	3091000	0.3	1.01E-02	36.6	477	10.0	0.9
570054	SCRAP-ALL, INC.	50_1	359400	3093100	2.6	-6.32E-03	11.6	497	15.5	0.2
570056	BUILDING MATERIALS MANUFACTURING CORP	10_1	362500	3087100	1.5	6.74E-02	10.7	714	23.4	0.6
		10_2	362200	3087200	1.5	6.50E-02	9.1	408	12.1	0.6
		10_3	362200	3087200	1.5	1.02E-01	7.6	714	24.3	0.6
		10_4	362500	3087100	1.5	-3.21E-02	7.6	714	23.4	0.6
570061	TAMPA ARMATURE WORKS	11_1	365660	3091750	5.9	1.76E-03	4.6	922	0.3	0.6
		11_2	365660	3091750	5.9	1.11E-03	4.6	477	10.1	0.2
		11_3	365700	3091800	5.0	8.11E-03	8.2	1033	5.9	0.5
570072	BALL METAL BEVERAGE CONTAINER CORP.	52_1	360500	3103000	15.2	-2.59E-05	12.2	300	5.2	0.4
		52_2	360500	3103000	15.2	-5.17E-05	12.2	361	11.6	0.3
		52_3	360500	3103000	15.2	-3.45E-05	10.7	422	18.8	1.3
570076	APAC SOUTHEAST, INC. - CENTRAL FL. DIV.	88_1	372100	3105400	14.4	-2.35E-01	8.5	422	24.4	1.2
		88_2	372100	3105400	14.4	-1.51E-01	10.7	408	26.9	1.1
		88_3[4]	372100	3105400	14.4	-1.41E-02	3.0	394	50.0	0.3
570077	VERLITE COMPANY	54_1	360200	3093000	1.6	-6.45E-03	15.2	383	8.5	0.6
570080	MARATHON PETROLEUM COMPANY LP	12_1	359500	3091700	0.0	2.44E-02	15.2	299	4.6	0.6
		12_2[5]	358540	3091700	1.8	4.89E-02	7.6	533	5.0	0.8
		12_3[5]	358540	3091700	1.8	6.47E-03	1.8	672	5.0	0.2
		12_4[5]	358540	3091700	1.8	3.85E-03	1.8	672	5.0	0.2
		12_5[3]	358540	3091700	1.8	1.18E-02	5.0	672	50.0	0.2
570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	74_1	358000	3089100	0.3	7.20E-02	12.2	294	3.7	0.3
570083	BUCKEYE TERMINALS, LLC	55_1	357790	3092000	3.0	-1.29E-04	6.1	271	0.4	0.2
570085	CENTRAL FLORIDA PIPELINE	56_1	358000	3089000	0.0	-1.10E-01	6.1	298	0.6	0.0
		56_2	358000	3089000	0.0	-5.72E-03	7.6	533	1.8	0.6
570089	ST. JOSEPH'S HOSPITAL	57_1	353300	3095900	10.1	-4.35E-02	10.7	450	7.3	0.6

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
570090	MASTER - HALCO, INC.	13_1	368200	3094600	12.0	2.01E-01	4.3	320		1.1
		75_1	368200	3094600	12.0	2.01E-01	4.3	320	9.4	1.1
570092	KINDER MORGAN PORT SUTTON TERMINAL, LLC	14_1[5]	362370	3087050	1.5	2.96E-03	5.0	672	5.0	0.0
570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	15_1	363600	3098500	19.4	7.74E-02	3.7	394	18.0	0.8
570119	TRADEMARK METALS RECYCLING, LLC	16_1	364700	3093600	6.2	1.78E-02	15.2	405	20.2	1.2
		16_2	364700	3093600	6.2	1.64E-02	15.2	405	20.2	1.2
		16_3	364700	3093700	7.8	-1.52E-02	8.5	1311	6.7	0.5
		16_4	364700	3093600	6.2	3.88E-02	7.6	533	20.0	0.2
570127	CITY OF TAMPA	17_1	360200	3092210	0.9	2.41E+00	61.3	430	22.3	1.3
		17_2	360200	3092210	0.9	2.35E+00	61.3	430	22.3	1.3
		17_3	360200	3092210	0.9	2.33E+00	61.3	430	22.3	1.3
		17_4	360200	3092210	0.9	2.40E+00	61.3	430	22.3	1.3
		17_5	360196	3092208	0.9	-2.81E+00	48.8	505	12.5	1.7
		17_6	360196	3092208	0.9	-2.91E+00	48.8	505	12.5	1.7
		17_7	360196	3092208	0.9	-2.02E+00	48.8	505	12.5	1.7
		17_8	360196	3092208	0.9	-1.91E+00	48.8	505	12.5	1.7
570136	VERLITE CO	59_1	363000	3098010	14.6	-3.31E-03	12.2	350	12.5	0.3
		59_2	363000	3098010	14.6	-3.85E-03	12.2	406	14.0	0.3
570160	BALL METAL BEVERAGE CONTAINER CORP.	76_1	362000	3103200	21.4	9.28E-02	13.1	380	9.0	0.5
		76_2	362000	3103200	21.4	6.19E-02	15.5	455	20.4	0.0
		76_3[5]	362000	3103200	21.4	1.38E-02	15.5	455	20.4	0.0
		76_4[4]	362000	3103200	21.4	-1.38E-03	12.2	339	10.0	0.2
		76_5	362000	3103200	21.4	6.60E-02	15.8	369	7.5	0.3
		76_6	362000	3103200	21.4	4.40E-02	15.8	369	7.5	0.3
570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	18_1[3]	364000	3098100	20.1	1.12E-01	3.0	672	45.3	0.2
		18_2[5]	364000	3098100	20.1	1.96E-01	9.1	533	14.9	1.4
		18_3[3]	364000	3098100	20.1	5.26E-04	3.0	672	45.3	0.2
		18_4	364000	3098100	20.1	-1.09E-01	10.4	436	18.9	1.4
570224	HARSCO MINERALS	77_1	362200	3085500	1.5	1.32E-02	9.1	327	10.7	1.2
570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	19_1	368200	3092700	10.9	6.49E+00	67.1	416	22.1	1.6
		19_2	368200	3092700	10.9	6.43E+00	67.1	416	22.1	1.6
		19_3	368200	3092700	10.9	6.61E+00	67.1	416	22.1	1.6
		19_4	368200	3092700	10.9	5.62E+00	67.1	405	31.1	1.6
570286	TAMPA SHIP, LLC	20_1	358000	3089000	0.0	2.66E-01	3.0	672	45.3	0.4
570290	E.A. MARIANI ASPHALT CO.	60_1	358200	3092000	2.6	-3.83E-02	8.2	497	5.5	0.4
		60_2	358200	3092000	2.6	-2.45E-02	7.9	533	1.2	0.8
570321	MANTUA MANUFACTURING CO.	61_1	364700	3092500	3.8	-5.00E-04	6.1	1033	4.0	0.2
570324	TAMPA STEEL ERECTING COMPANY	62_1[1]	362100	3089200	2.0	-4.87E-02	N/A	N/A	N/A	N/A
570373	CITY OF TAMPA-WASTEWATER DEPT	21_1	364000	3089500	4.2	1.73E-01	22.9	375	25.2	0.9
		21_2	364000	3089500	4.2	1.55E-02	22.9	375	8.8	1.5
		21_3	358250	3089620	1.2	3.31E-02	15.2	755	28.7	0.5
		21_4	364000	3089500	4.2	3.42E-03	10.7	661	27.6	0.7
		21_5[3]	364000	3089500	4.2	5.57E-03	10.7	661	27.6	0.7
570378	HILLSBOROUGH RESOURCE RECOVERY, INC	63_1[4]	362790	3088270	3.7	-5.75E-03	6.1	1033	4.0	0.2
		64_1[3]	362790	3088270	3.7	-3.19E-02	2.0	672	50.0	0.2
570409	CONIGLIO CONSTRUCTION AND DEMOLITION DEB	65_1[4]	368900	3104200	15.1	-6.77E-01	6.1	1033	4.0	0.2
570436	BAY CITY SAND, INC.	66_1[4]	362800	3096010	14.3	-7.42E-02	6.1	1033	4.0	0.2
570442	GULF MARINE REPAIR/HENDRY CORPORATIONS	22_1[3]	360300	3091900	0.6	6.49E-01	5.0	672	50.0	0.3
570459	BAUSCH & LOMB INCORPORATED	78_1[4]	366390	3105750	11.0	-5.90E-02	11.3	450	10.0	0.5
570461	BLACKLIDGE EMULSIONS INCORPORATED	23_1[5]	359500	3093200	1.9	1.42E-02	9.1	533	15.0	1.4
570480	UNIVERSITY OF SOUTH FLORIDA (USF)	67_1[4]	360770	3104760	11.6	-6.01E-03	19.8	533	20.0	1.4
		67_2[4]	360770	3104760	11.6	-7.59E-02	19.8	533	20.0	1.4
571130	BRANDON REGIONAL MEDICAL CENTER	68_1[4]	373270	3090500	12.8	-6.61E-04	8.8	533	20.0	0.6
571151	INTERNATIONAL PAPER COMPANY	24_1[4]	362800	3098300	12.0	6.64E-02	10.4	533	5.0	0.6
571209	THE LANE CONSTRUCTION COMPANY	69_1[4]	359860	3088090	0.3	-2.24E-03	8.8	533	20.0	0.6
571217	SEA 3 OF FLORIDA, INC.	79_1[5]	360100	3087100	0.3	1.29E-03	12.2	311	5.0	0.6
		79_2[4]	360100	3087100	0.3	3.88E-03	12.2	533	10.0	0.9
		79_3[4]	360100	3087100	0.3	1.05E-02	4.6	533	10.0	1.5
571240	CARGILL INC.- SALT DIVISION	25_1[4]	359750	3090370	0.0	1.94E-02	6.7	672	14.4	0.8

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
571269	H. LEE MOFFITT CANCER CENTER	80_1[4]	360350	3105080	13.5	7.15E-02	21.0	486	10.0	0.8
		80_2[4]	360350	3105080	13.5	6.59E-02	21.0	486	10.0	0.8
		80_3[4]	360350	3105080	13.5	5.07E-02	21.0	486	10.0	0.6
		80_5[3]	360350	3105080	13.5	1.26E-02	3.0	672	50.0	0.2
		80_6[3]	360350	3105080	13.5	1.91E-02	3.0	672	50.0	0.2
		80_7[3]	360350	3105080	13.5	2.45E-02	3.0	672	50.0	0.2
		80_8[3]	360350	3105080	13.5	3.97E-02	3.0	672	50.0	0.2
		80_9[3]	360350	3105080	13.5	3.58E-02	3.0	672	50.0	0.2
		80_10[3]	360350	3105080	13.5	3.46E-02	3.0	672	50.0	0.2
		80_11[3]	360350	3105080	13.5	2.36E-02	3.0	672	50.0	0.2
571279	FLORIDA GAS TRANSMISSION COMPANY	81_1	372160	3102410	29.2	1.10E-01	18.6	787	13.0	2.1
		81_2	372160	3102410	29.2	1.35E-01	18.6	787	13.0	2.1
571290	TITAN AMERICA, LLC	25_2[3]	359940	3087810	2.3	2.06E-03	3.0	672	45.3	0.2
		25_3[3]	359940	3087810	2.3	2.61E-04	2.1	672	45.3	0.2
		25_4[3]	359940	3087810	2.3	5.61E-04	2.1	672	45.3	0.2
		25_5[3]	359940	3087810	2.3	1.52E-04	3.0	672	45.3	0.2
571301	L.V. THOMPSON, INC. (TAMCO)	26_1	361610	3092190	0.6	1.06E-02	2.7	727	7.4	0.8
571312	HENDRY CORPORATION	70_1[5]	358000	3091000	0.6	-2.43E-03	5.0	400	20.0	0.1
571337	TAMPA PAVEMENT CONSTRUCTORS, INC., A SUB	27_1[5]	364300	3097640	11.4	3.48E-02	5.0	672	50.0	0.2
		27_2	364300	3097640	11.4	1.56E-01	8.2	422	13.8	1.4
571342	BLACKLIDGE EMULSIONS, INC.	28_1[5]	363720	3087370	2.8	1.81E-02	5.0	533	5.0	1.0
571402	ANCHOR SANDBLASTING AND PAINTING, INC	29_1[3]	361150	3089420	1.5	9.88E-03	5.0	672	50.0	0.2
		29_2[3]	361150	3089420	1.5	2.86E-03	5.0	533	5.0	2.4
810010	FLORIDA POWER & LIGHT (PMT)	30_1	367150	3054230	16.8	1.08E+01	152.1	446	23.8	8.3
		30_2	367150	3054230	16.8	1.62E+01	152.1	436	25.1	8.0
		30_3	367150	3054230	16.8	3.72E-03	4.9	650	48.4	0.4
		30_4	367250	3054150	16.2	1.37E+00	36.6	875	31.9	6.7
		30_5	367250	3054150	16.2	1.24E+00	36.6	367	18.0	5.8
		30_6	367250	3054150	16.2	1.37E+00	36.6	367	18.0	5.8
		30_7	367250	3054150	16.2	1.45E+00	36.6	367	18.0	5.8
		30_8[3]	367150	3054230	16.8	1.69E-02	4.9	650	48.4	0.4
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	31_1	324440	3118930	2.9	1.70E+01	152.1	433	18.9	7.3
		31_2	324440	3118930	2.9	1.43E+01	152.1	433	18.9	7.3
		31_3[5]	324440	3118930	2.9	7.06E-03	2.4	672	5.0	0.2
		31_4[5]	324440	3118930	2.9	4.82E-03	1.8	672	5.0	0.1
1010056	PASCO COUNTY	32_1	347110	3139110	14.9	7.70E+00	83.8	394	25.0	1.4
		32_2	347110	3139110	14.9	7.28E+00	83.8	394	25.0	1.4
		32_3	347110	3139110	14.9	7.57E+00	83.8	394	25.0	1.4
		32_4	347370	3139050	15.6	-8.31E-04	9.1	450	5.8	0.3
1010373	SHADY HILLS POWER COMPANY, L.L.C.	33_1	347240	3138710	15.5	1.36E+00	18.3	874	35.4	6.7
		33_2	347280	3138710	15.6	1.13E+00	18.3	874	35.4	6.7
		33_3	347320	3138700	15.8	1.27E+00	18.3	874	35.4	6.7
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	34_1	342570	3082680	0.3	1.08E-02	9.1	541	5.2	0.9
		34_2	343870	3082690	0.0	8.68E-02	13.7	772	21.1	5.5
		34_3	343870	3082690	0.0	8.68E-02	13.7	772	21.1	5.5
		34_4	343870	3082690	0.0	1.91E-01	13.7	772	21.1	5.5
		34_5	343870	3082690	0.0	1.71E+00	13.7	772	21.1	5.5
		34_6	343870	3082690	0.0	4.92E+00	40.2	361	21.3	5.5
		34_7	343870	3082690	0.0	4.46E+00	40.2	361	21.3	5.5
		34_8	343870	3082690	0.0	4.60E+00	40.2	361	21.3	5.5
		34_9	343870	3082690	0.0	4.88E+00	40.2	361	21.3	5.5
		34_10	343870	3082690	0.0	3.78E-02	5.0	672	5.0	0.0
		34_11[5]	343870	3082690	0.0	1.28E-03	5.0	672	5.0	0.0
		34_12	342900	3082600	0.0	-4.41E+00	5.0	429	36.3	2.7
		34_13[5]	343870	3082690	0.0	-3.39E+00	5.0	425	31.1	2.7
		34_14[5]	343870	3082690	0.0	-4.27E-01	5.0	408	34.4	3.4
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	35_1	336690	3098650	1.5	1.22E-02	16.8	727	28.4	4.6
		35_2	336660	3098660	1.5	1.44E-02	17.1	727	28.4	4.6
		35_3	336620	3098660	1.5	2.72E-02	16.8	727	28.4	4.6
		35_4	336580	3098660	1.4	2.24E-02	16.8	727	28.4	4.6
		35_5	336500	3098400	1.6	-2.36E-01	53.0	429	8.2	3.8
		35_6	336500	3098400	1.6	-1.65E-01	53.0	427	8.2	3.8
		35_7	336500	3098400	1.6	-1.41E-01	53.0	422	7.3	3.8

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	36_1	338860	3071480	0.4	8.80E-02	12.2	755	6.4	7.0
		36_2	338860	3071480	0.4	1.25E-01	12.2	755	6.4	7.0
		36_3	338860	3071480	0.4	1.53E-01	12.2	755	6.4	7.0
		36_4	338860	3071480	0.4	9.08E-02	12.2	755	6.4	7.0
1030117	PINELLAS COUNTY UTILITITES ADMIN.	37_1	335270	3084310	2.7	1.53E+01	50.3	405	21.8	2.6
		37_2	335270	3084310	2.7	1.11E+01	50.3	405	21.8	2.6
		37_3	335270	3084310	2.7	1.22E+01	50.3	405	21.8	2.6
		37_4[5]	335270	3084310	2.7	5.06E-04	4.6	672	5.0	0.1
		37_5[5]	335270	3084310	2.7	9.29E-04	4.6	672	5.0	0.1
		37_6[5]	335270	3084310	2.7	8.04E-02	5.0	672	5.0	0.1
		37_7[5]	335270	3084310	2.7	9.29E-04	4.6	672	5.0	0.1
		37_8[5]	335270	3084310	2.7	9.29E-04	4.6	672	5.0	0.1
		37_9[5]	335270	3084310	2.7	9.29E-04	4.6	672	5.0	0.1
		37_10[5]	335270	3084310	2.7	9.29E-04	4.6	672	5.0	0.1
1050003	LAKELAND ELECTRIC	38_1	409100	3102800	40.5	4.13E-03	9.4	700	30.8	3.6
		38_2	409100	3102800	40.5	6.47E-03	9.4	700	30.8	3.6
		38_3	409000	3102800	40.7	4.02E-01	47.2	522	26.1	4.9
		38_4	408900	3102900	42.6	-3.65E-01	50.3	444	6.4	3.0
		38_5	409000	3102800	40.7	-4.86E-01	50.3	444	6.7	3.0
1050004	LAKELAND ELECTRIC	39_1	409200	3106200	39.6	1.67E-01	45.7	409	24.7	2.7
		39_2	409100	3106300	41.1	2.26E-03	6.1	652	23.5	0.8
		39_3	409020	3106020	39.6	9.81E-03	6.1	652	23.5	0.8
		39_4	409200	3106400	41.7	2.07E-02	10.7	755	24.2	4.1
		39_5	409200	3106200	39.6	4.08E-01	47.9	409	22.3	3.2
		39_6	409300	3106300	39.6	4.01E+01	76.2	348	25.2	5.5
		39_7	408790	3106860	41.7	1.04E-03	2.1	672	5.0	0.1
		39_8[5]	408790	3106860	41.7	5.05E-01	3.0	672	5.0	0.1
		39_9[5]	408790	3106860	41.7	1.93E-02	2.4	672	5.0	0.2
		39_10[5]	408790	3106860	41.7	2.86E-02	2.1	672	5.0	0.1
		39_11[5]	409000	3106800	42.6	5.82E+00	25.9	864	25.2	8.5
1050059	MOSAIC FERTILIZER LLC	87_1	396670	3079300	47.2	8.79E-01	61.0	350	15.2	2.6
		87_2	396670	3079300	47.2	8.79E-01	61.0	350	15.2	2.6
		87_3	396670	3079300	47.2	1.14E+00	61.0	350	15.2	2.6
		87_4	396670	3079300	47.2	1.14E+00	61.0	350	15.2	2.6
		87_5	396670	3079300	47.2	7.67E-01	61.0	350	15.2	2.6
		87_6	396670	3079300	47.2	7.67E-01	61.0	350	15.2	2.6
		87_7	396670	3079300	47.2	3.00E-01	40.5	314	14.9	2.1
		87_8	396670	3079300	47.2	-4.54E-02	40.5	325	25.3	1.8
		87_9	396670	3079300	47.2	-2.01E-02	25.9	564	58.9	0.9
		87_10	396700	3079400	46.7	2.55E+00	52.4	327	20.2	2.4
		87_11	396670	3079300	47.2	-2.87E-06	26.2	377	78.6	0.5
		87_12	396670	3079300	47.2	-2.87E-06	26.2	407	68.6	0.5
		87_13	396670	3079300	47.2	-3.10E-01	52.4	314	15.8	1.4
		87_14	396670	3079300	47.2	1.01E+00	60.7	350	15.2	2.6
		87_15	396670	3079300	47.2	9.96E-01	60.7	350	15.2	2.6
		87_16	396670	3079300	47.2	6.27E-02	52.1	316	17.7	1.8
		87_17	396450	3079290	47.3	1.25E-01	52.1	316	17.7	1.8
		87_19	396670	3079300	47.2	-2.44E-01	52.4	314	21.4	1.4
		87_20	396670	3079300	47.2	5.45E-01	40.5	336	33.4	1.8
1050146	PAVEX CORP DBA RANGER CONSTRUCTION-SOUTH	82_1	413000	3086200	46.6	-5.93E-02	12.2	255	17.2	1.2
1050221	AUBURNDALE POWER PARTNERS, LP	72_1[5]	420800	3103200	44.0	-3.71E-01	15.2	807	25.2	6.7
		72_2[5]	421000	3103200	43.3	-1.41E+00	43.3	366	19.3	5.6
		72_3[5]	421000	3103200	43.3	-1.54E+00	43.3	366	19.3	5.6
1050223	FLORIDA POWER CORPDBA PROGRESS ENERGY FL	83_1	416250	3069370	48.0	3.93E+00	54.9	369	19.2	5.8
		83_2	416250	3069370	48.0	3.93E+00	54.9	369	19.2	5.8
		83_3	416250	3069370	48.0	3.93E+00	54.9	369	19.2	5.8
		83_4	416250	3069370	48.0	3.93E+00	54.9	369	19.2	5.8
		83_5	416250	3069370	48.0	3.93E+00	54.9	369	19.2	5.8
		83_7	416200	3069220	48.3	1.18E-03	12.2	433	11.8	1.2

FACILITY ID	COMPANY NAME	Source ID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temp.	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1050233	TAMPA ELECTRIC COMPANY	40_1	402440	3067360	41.8	1.01E+01	45.7	444	23.1	5.8
		40_2	402440	3067360	41.8	2.32E-03	22.9	464	15.2	1.1
		40_3	402440	3067360	41.8	2.81E-02	60.7	355	18.3	0.8
		40_4[1]	402440	3067360	41.8	8.80E-02	N/A	N/A	N/A	N/A
		40_5[5]	402440	3067360	41.8	1.78E-03	5.0	672	5.0	0.1
		40_6	402450	3067350	41.8	3.87E-01	34.7	876	18.3	8.8
		40_7	402450	3067350	41.8	5.52E-01	34.7	876	18.3	8.8
		40_8	402440	3067360	41.8	7.76E-01	34.7	876	47.8	5.5
		40_9	402440	3067360	41.8	8.65E-01	34.7	876	47.8	5.5
1050234	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	41_1	414170	3074100	48.8	4.31E+00	38.1	361	18.1	5.8
		41_2	414340	3073900	48.8	5.29E+00	38.1	361	18.1	5.8
		41_3[5]	414170	3074100	48.8	1.36E-02	6.7	672	5.0	0.6
		41_4[5]	414400	3073900	48.8	1.45E+00	38.1	361	18.1	5.8
		41_5	414400	3073900	48.8	1.44E+00	38.1	361	18.1	5.8
		41_6	414400	3073900	48.8	1.58E+00	38.1	361	18.1	5.8
		41_7	414400	3073900	48.8	1.57E+00	38.1	361	18.1	5.8
		41_8	414170	3074100	48.8	1.28E+00	38.1	367	20.7	5.5
		41_9	414170	3074100	48.8	1.14E+00	38.1	367	20.7	5.5
7771101	WOODRUFF & SONS INC[1]	43_1[3]	361885	3093420	5.6	7.08E-02	3.0	672	45.3	0.2
7775424	AJAX PAVING INDUSTRIES, INC.	84_1[3]	362810	3085710	1.5	1.99E-02	3.0	644	50.0	0.2
		84_2	362810	3085710	1.5	1.59E-01	12.2	383	13.4	1.2

Notes:

[1] Coordinates verified and changed in previous PSD permit application (October 2012)

[3] Modified source parameters (diesel engine)

[4] Modified source parameters (boiler/heater)

[5] Parameters filled in with conservative assumptions

Any Inactive EU was included in the model as a negative emission

Table 3.11
Summary of Full Impact Analysis: NO_2
EnviroFocus Technologies, LLC
Tampa, Florida

a) Modeling Results for NO_2 1-hour Average Modeling

Year	Receptor		Maximum Modeled Concentration[1] ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m3$)	Apparent Violation of NAAQS?	EnviroFocus Impact > SIL at Violation[2]
	X	Y						
2006-2010	358635	3086893	732	62	794	188	Yes	**No**

Notes:
[1] The 5-year average of the 98th percentile (highest 8th highest) of the daily 1-hour maximum concentrations
[2] MADXCONT option in AERMOD used to demonstrate EnviroFocus impact is less than the SIL at the time and location of any violation

b) Modeling Results for NO_2 Annual Average Modeling

Year	Receptor		Maximum Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Apparent Violation of NAAQS?
	X	Y					
All Receptors in Modeling Domain							
2006	361135	3087393	146	9.6	155	100	Yes
2007	361135	3087393	151	9.6	160	100	Yes
2008	361135	3087393	119	9.6	129	100	Yes
2009	361135	3087393	179	9.6	188	100	Yes
2010	361135	3087393	153	9.6	163	100	Yes
Receptors where EnviroFocus Impact exceeds Significance Threshold							
2006	364023	3093704	22	9.6	32	100	**No**
2007	364023	3093704	28	9.6	38	100	**No**
2008	364023	3093704	26	9.6	36	100	**No**
2009	364023	3093704	23	9.6	33	100	**No**
2010	364023	3093704	22	9.6	31	100	**No**

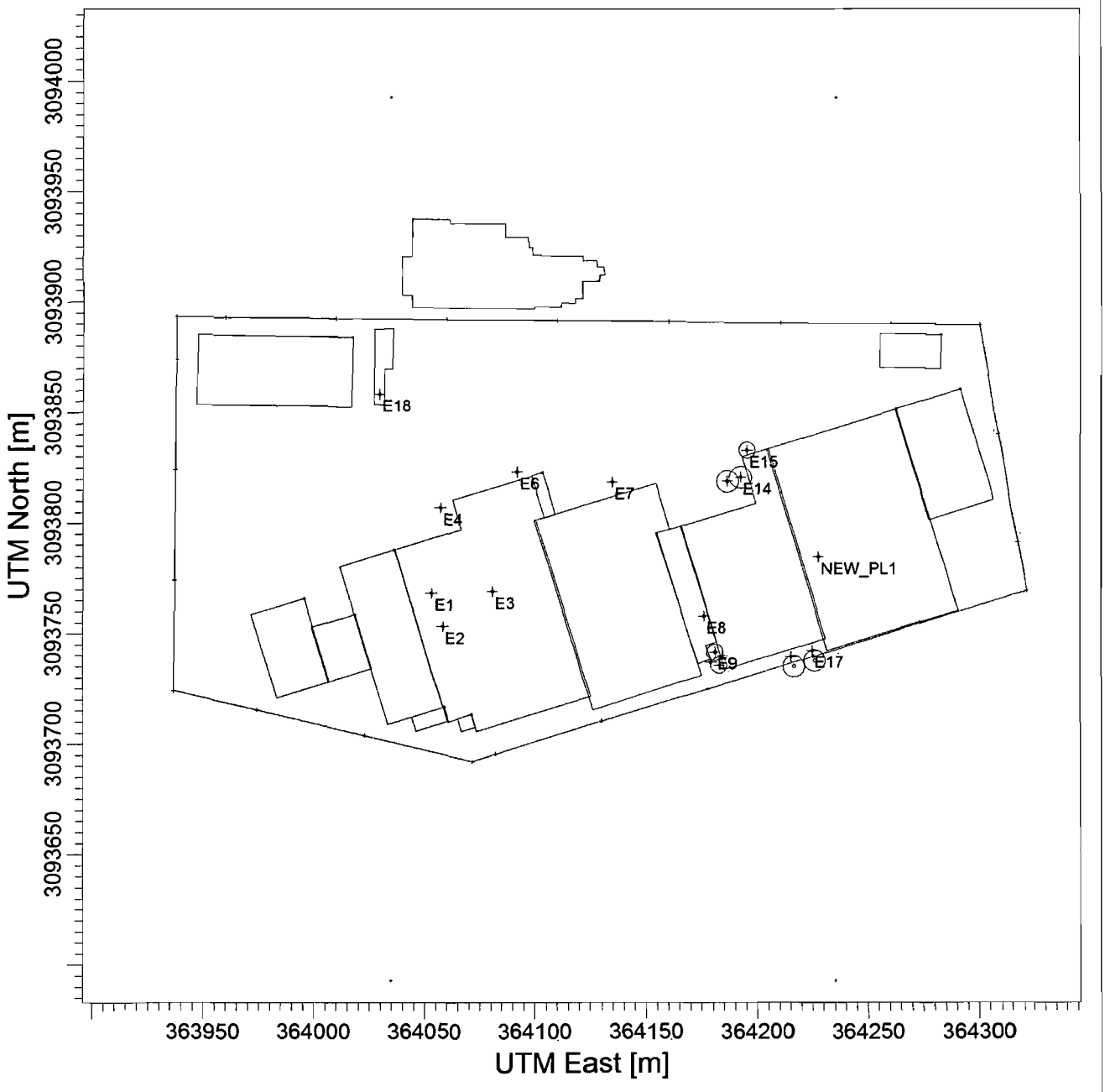
c) Modeling Results for NO_2 Annual Average Increment Modeling

Year	Receptor		Maximum Modeled Concentration ($\mu g/m3$)	PSD Increment ($\mu g/m^3$)	Violation of Increment?
	X	Y			
2006	364023	3093704	5.6	25.0	No
2007	364023	3093704	9.8	25.0	No
2008	364023	3093704	8.0	25.0	No
2009	364023	3093704	4.5	25.0	No
2010	363635	3093593	3.7	25.0	No

Appendix B
Figures

IMAGE TITLE

Figure 3.1 - EnviroFocus Modeled Sources at the Facility

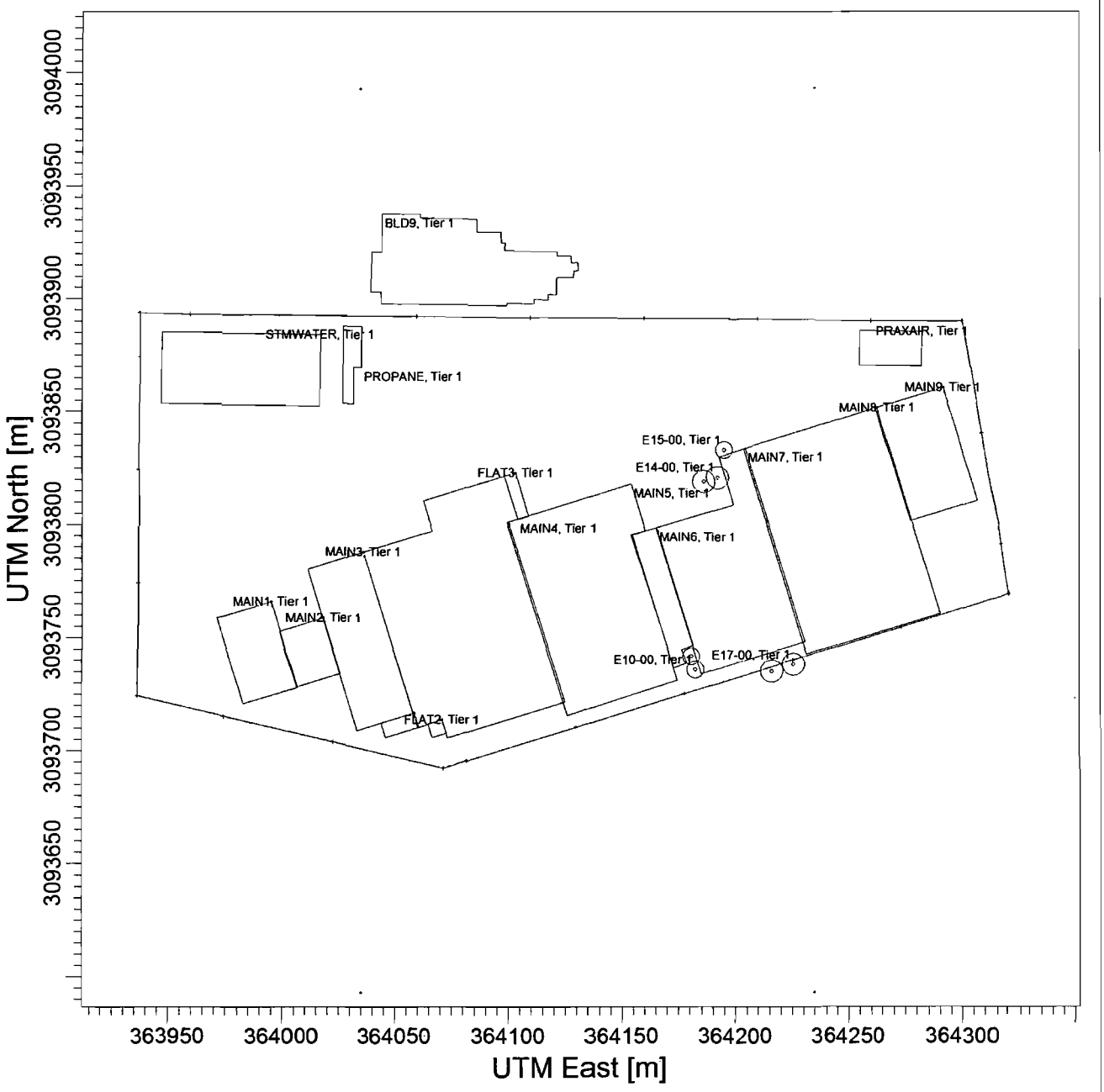


COMMENTS: Figure 3.1 - EnviroFocus Modeled Sources at the Facility	SOURCES: **297**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
		SCALE: 1:2,866 0 0.1 km	
		DATE: **3/26/2013**	PROJECT NO.. **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.2 - EnviroFocus Buildings

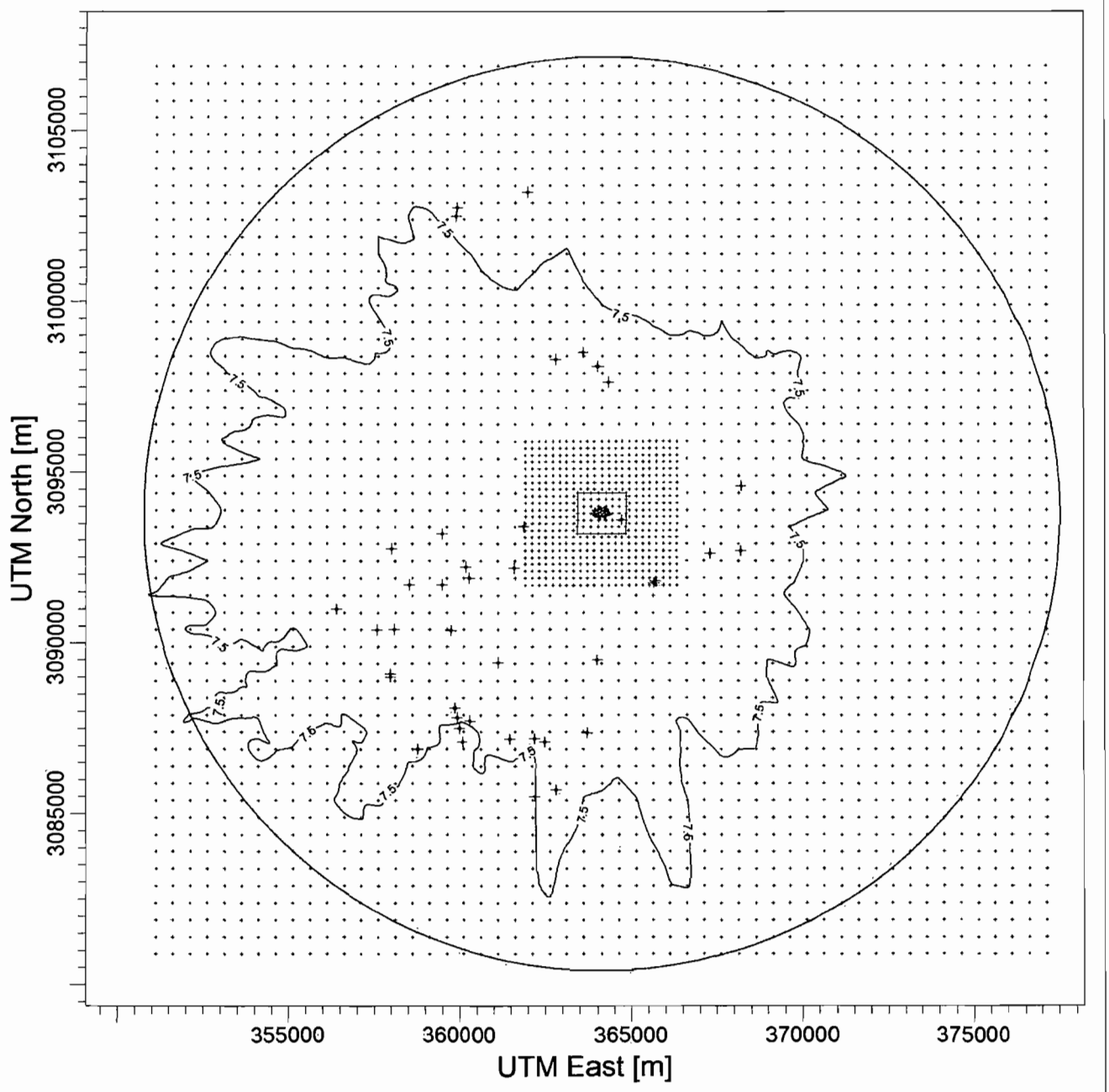


COMMENTS: Figure 3.2 - EnviroFocus buildings used in modeling	SOURCES: **118**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
		SCALE: 1:2,806 0 0.1 km	
		DATE: **3/27/2013**	PROJECT NO. **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.3 - EnviroFocus 1-hour NAAQS Modeling SIA

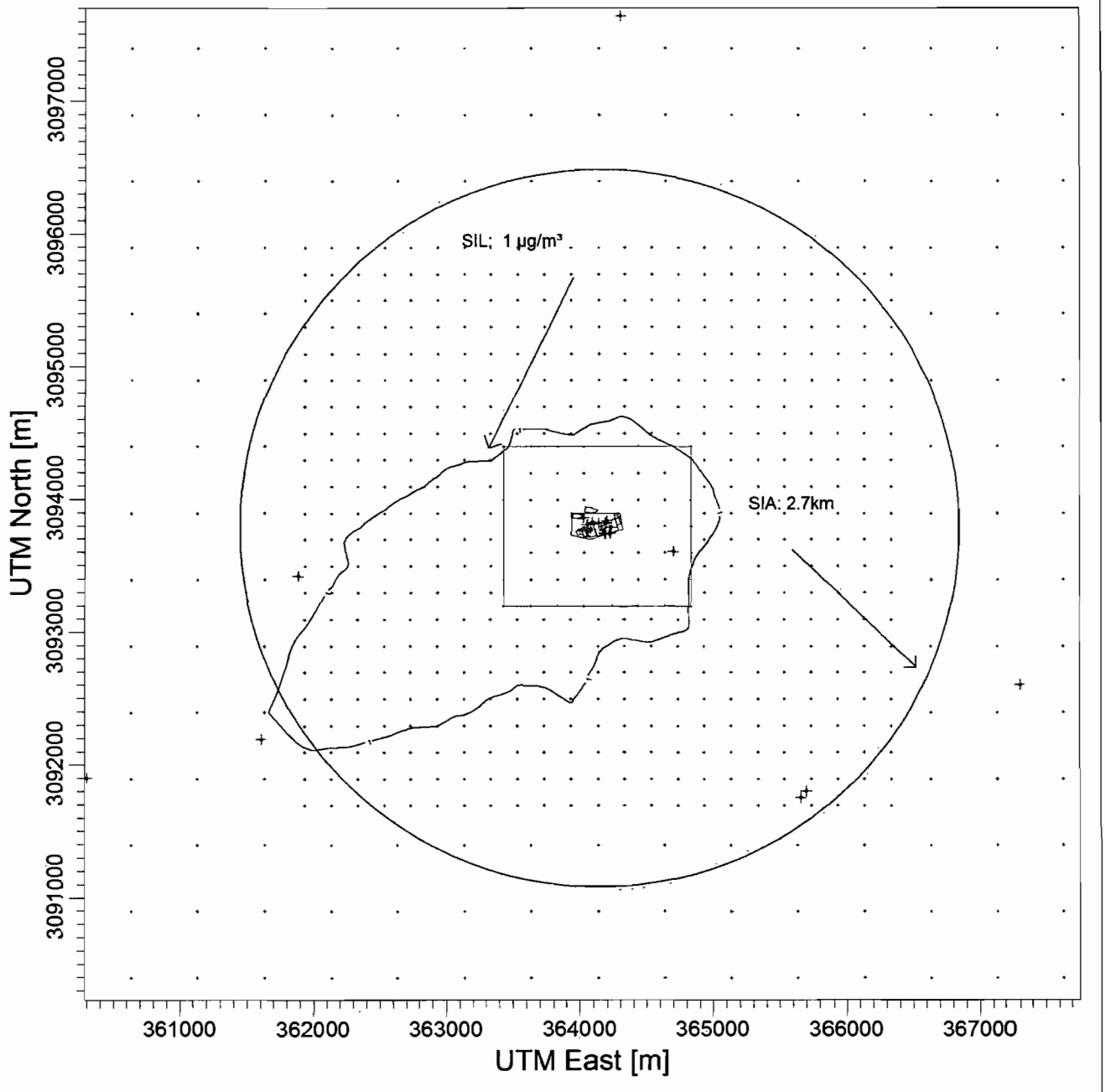


COMMENTS: Figure 3.3 - EnviroFocus SIA for 1-hour NAAQS Modeling (13.4km) -1st highest 5-year average modeled concentration	SOURCES: **118**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
	OUTPUT TYPE: **Concentration**	SCALE: 1:185,494 0 5 km	
	MAX: **113.71571 ug/m^3**	DATE: **7/5/2013**	PROJECT NO.: **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.4 - EnviroFocus SIA for Annual NAAQS Modeling

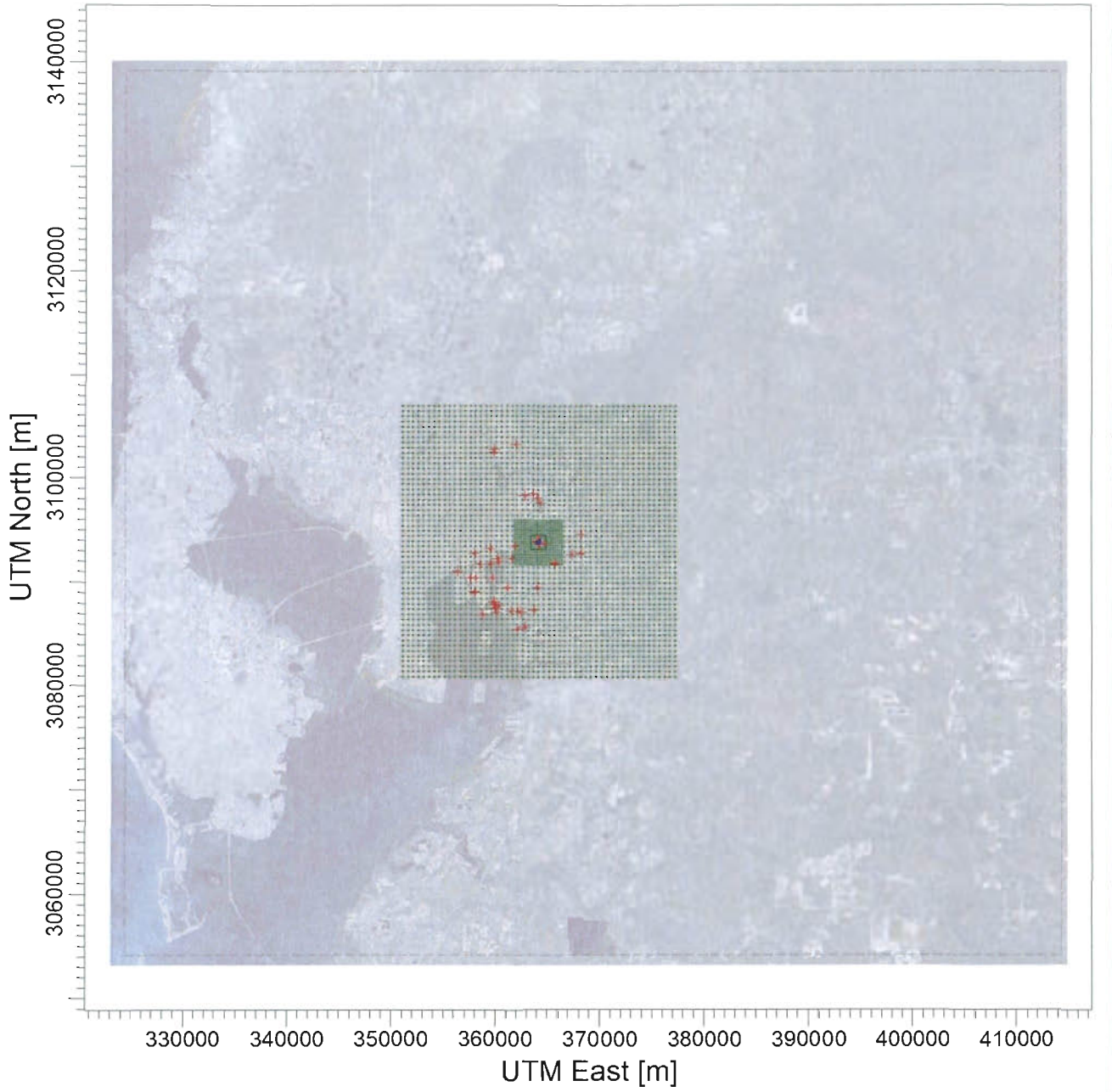


COMMENTS: Figure 3.4 - Annual NAAQS Modeling SIA (2.7km) -Results shown for 2007 meteorological data (largest SIA)	SOURCES. **297**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
	OUTPUT TYPE. **Concentration**	SCALE: 1:47,590 0 1 km	
	MAX: **22.95874 ug/m^3**	DATE: **7/5/2013**	PROJECT NO.. **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.5 - Neighboring sources included in 1-hour NAAQS Modeling

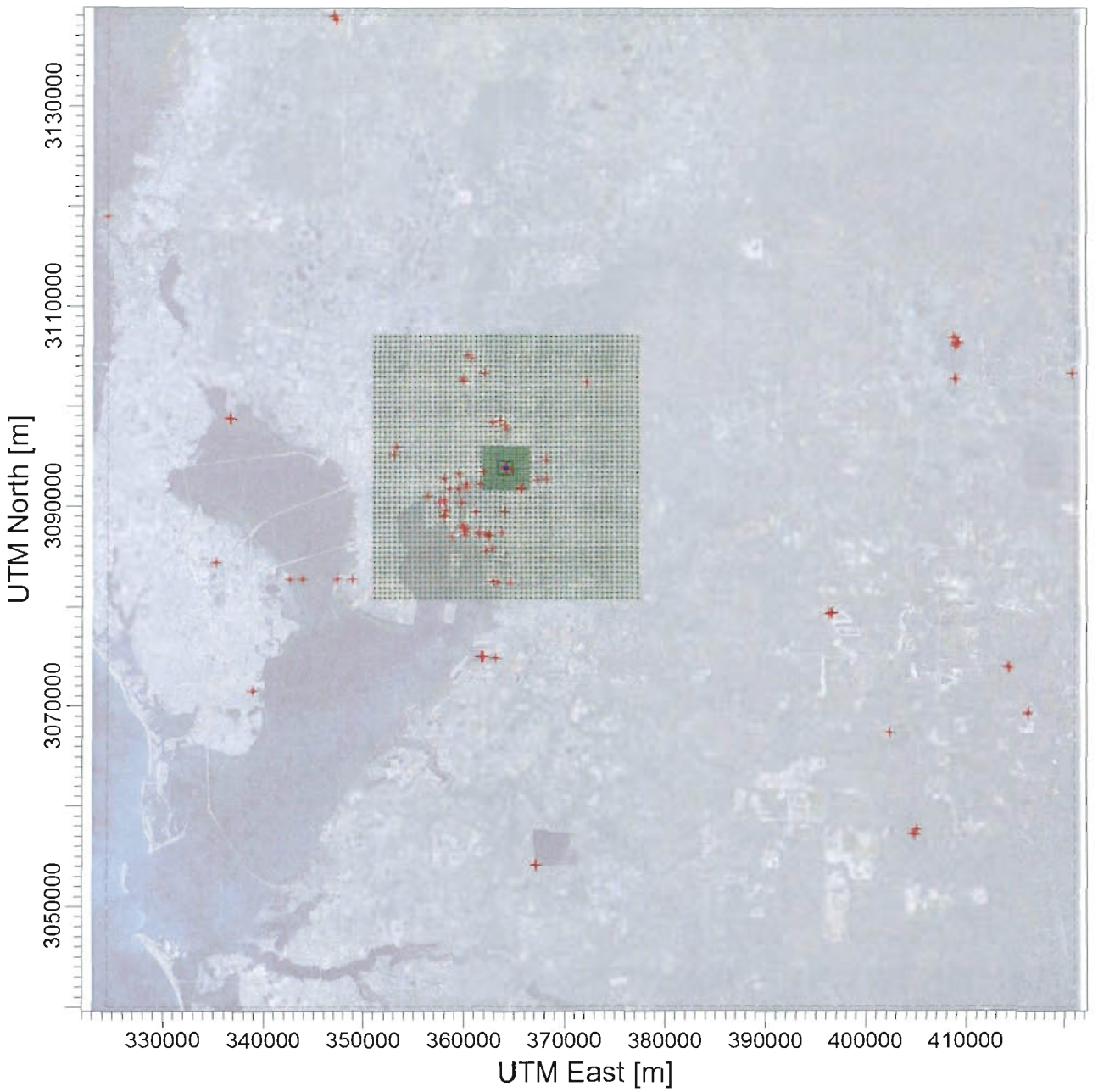


COMMENTS: Figure 3.5 - All sources included in 1-hour NO2 modeling	SOURCES: **118**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
		SCALE: 1:615,796 0 20 km	
		DATE: **3/27/2013**	PROJECT NO.: **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.6 - Neighboring sources included in Annual NAAQS Modeling

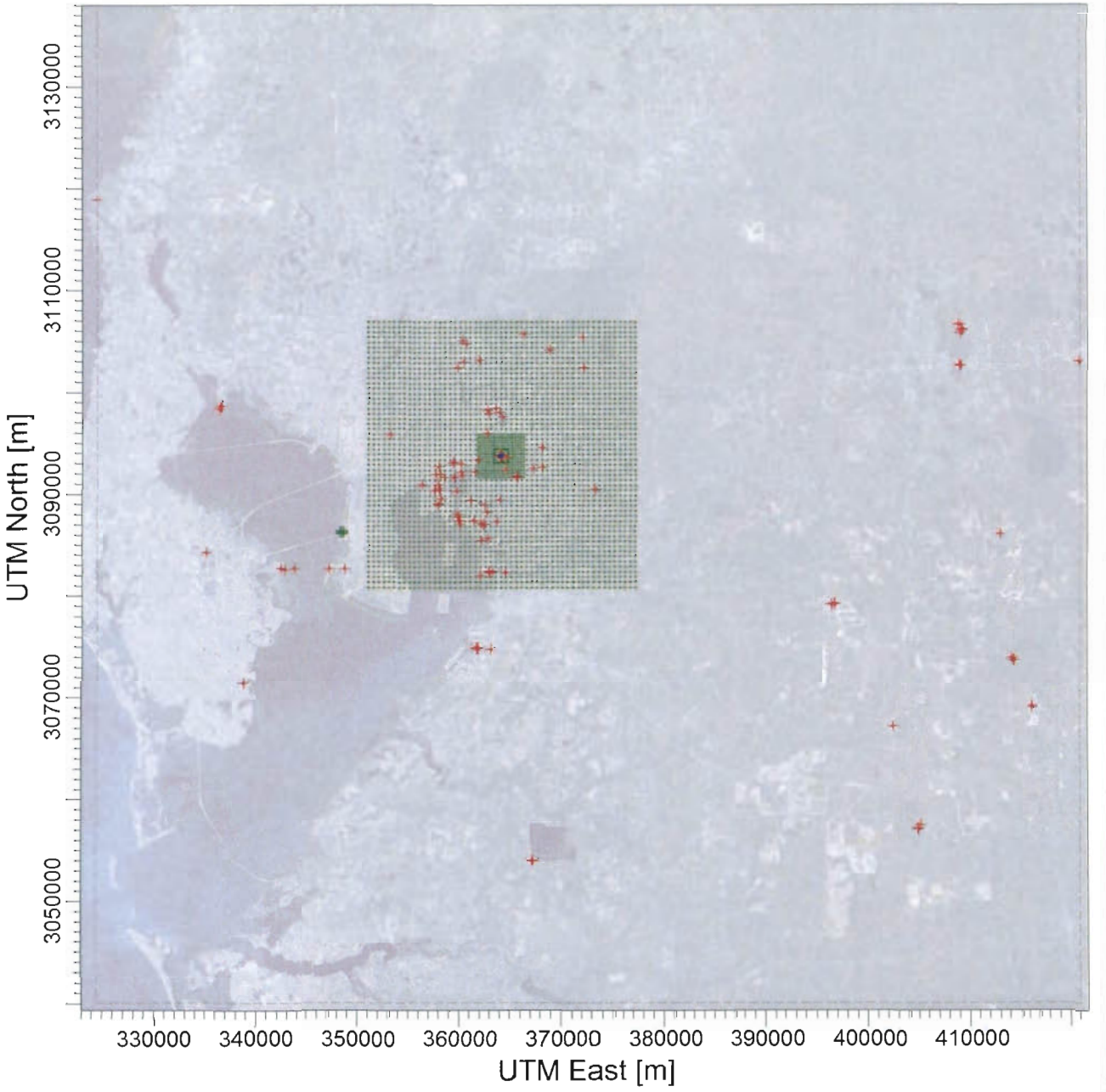


COMMENTS: Figure 3.6 - All sources included in annual NO2 modeling	SOURCES: **297**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
		SCALE: 1:638,579 0 20 km	
		DATE: **3/27/2013**	PROJECT NO.: **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.7 - Neighboring sources included in Annual Increment Modeling

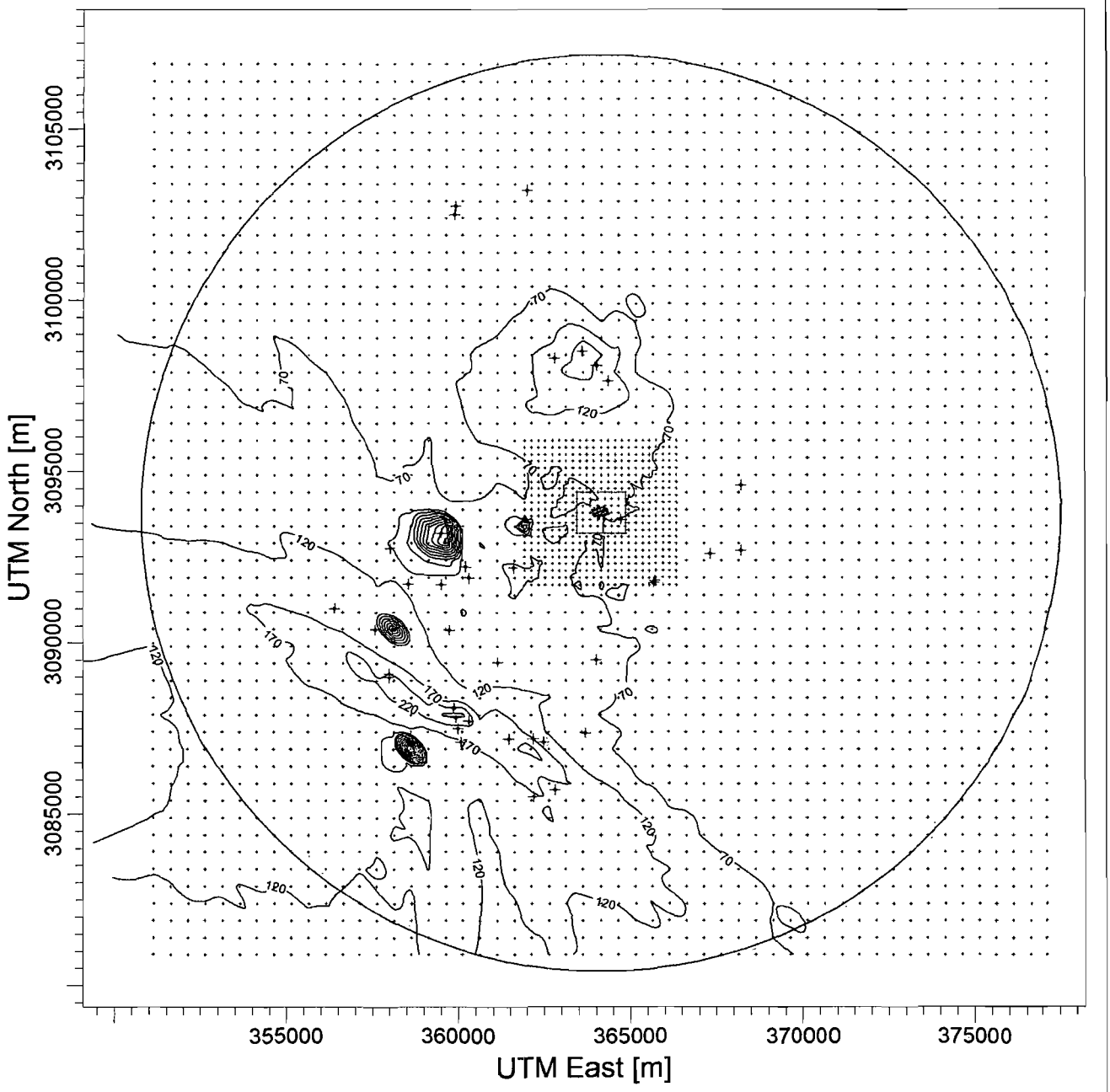


COMMENTS. Figure 3.7 - All sources included in Increment NO2 modeling	SOURCES. **349**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
		SCALE: 1:628,502 0 20 km	
		DATE: **3/27/2013**	PROJECT NO.: **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.8 - 1-hour NAAQS Modeling Results

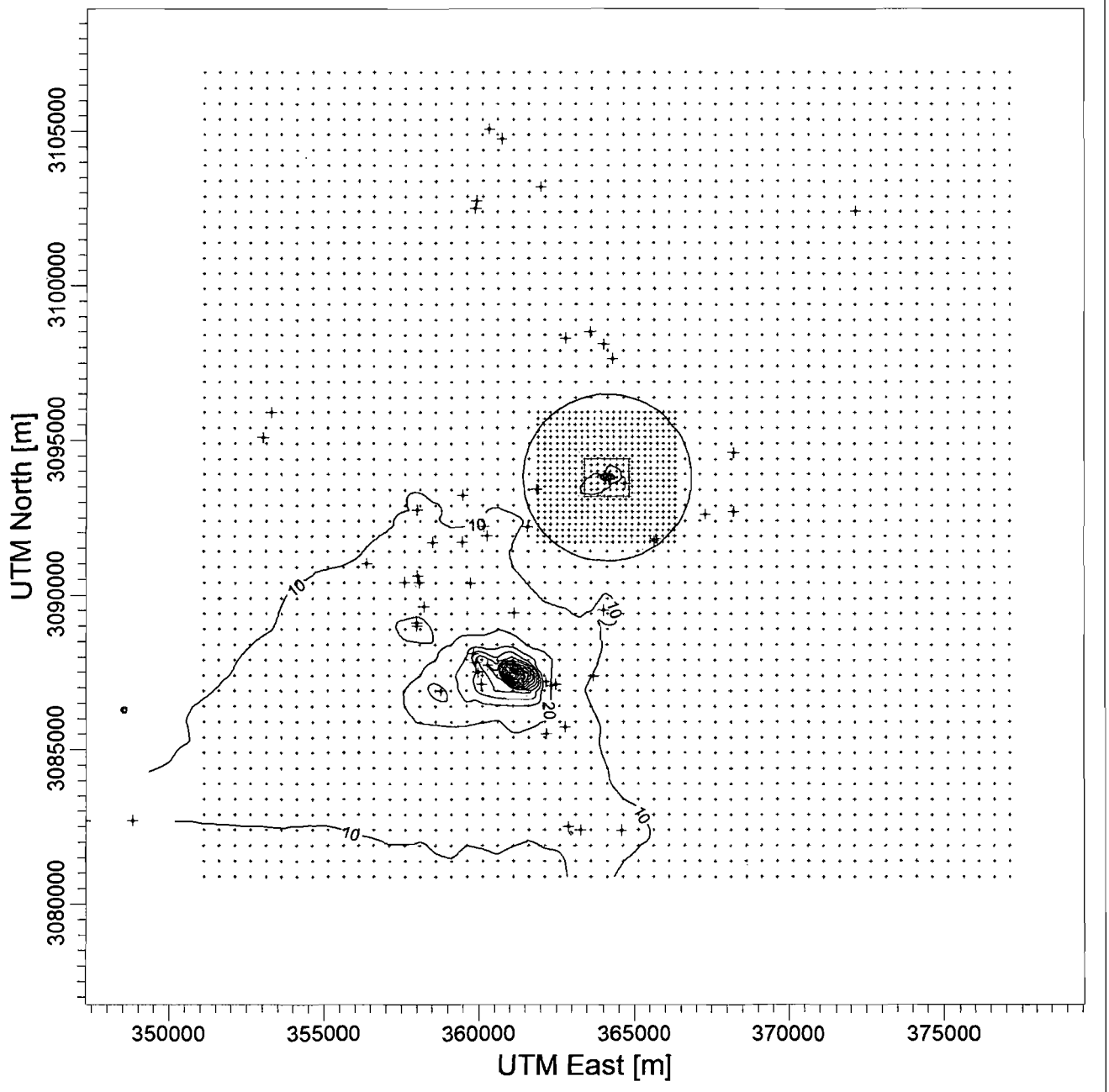


COMMENTS: Figure 3.8 - 1-hour NO2 modeling results -Background not included in modeling	SOURCES: **118**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
	OUTPUT TYPE: ***Concentration***	SCALE: 1:185,493 0 5 km	
	MAX: **731.89369 ug/m^3**	DATE: **7/5/2013**	PROJECT NO.: **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.9 - Annual NAAQS Modeling Results

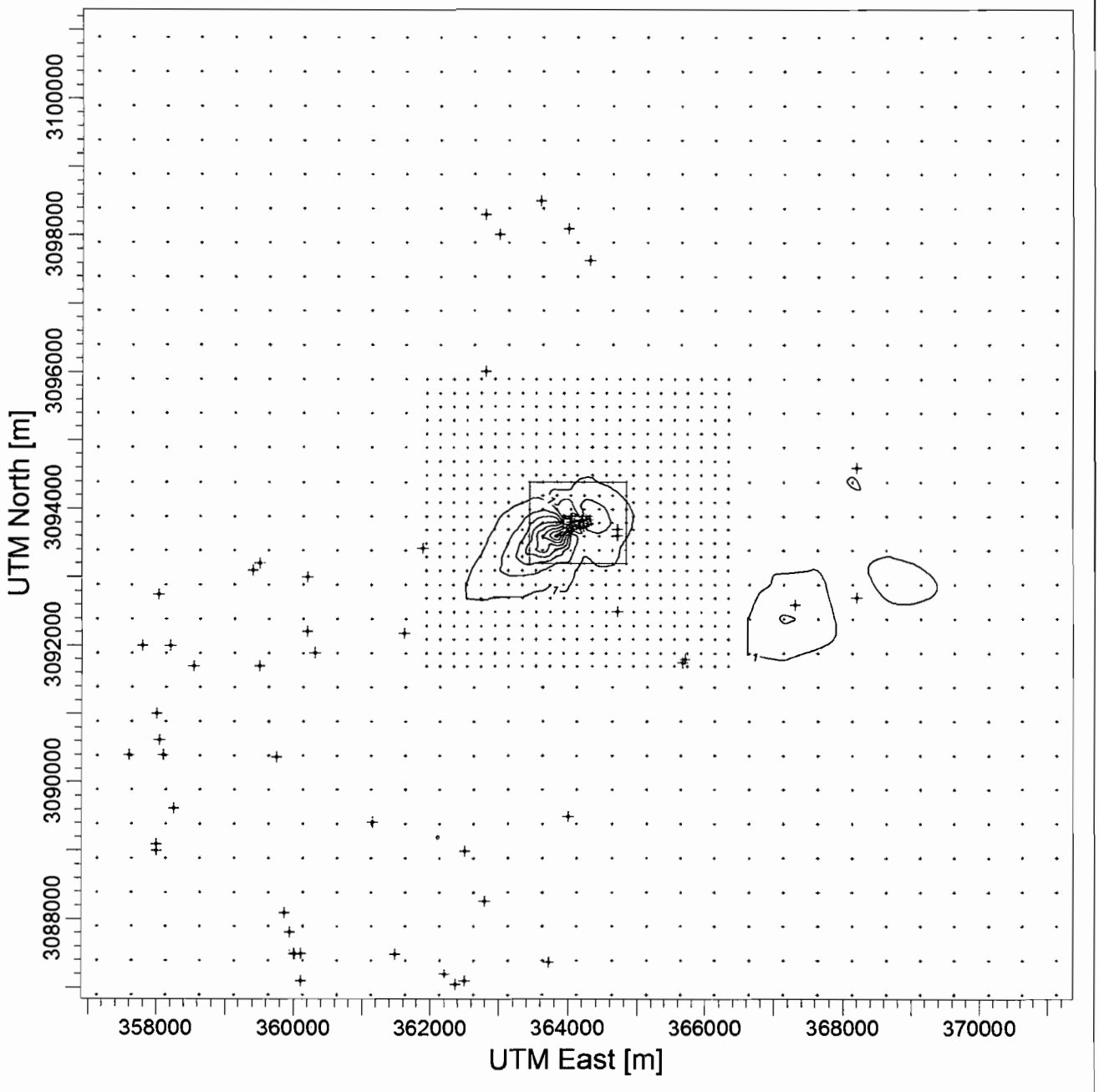


COMMENTS: -Background not included in modeling -Results shown for 2009 meteorological data	SOURCES: **297**	COMPANY NAME: ***EnviroFocus Technologies, LLC***	
	RECEPTORS: **3295**		ENVIRON
	OUTPUT TYPE: **Concentration**	SCALE: 1:205,234 0 5 km	
	MAX: **178.64052 ug/m^3**	DATE: **7/5/2013**	PROJECT NO.. **07-15422D**

AERMOD View - Lakes Environmental Software

IMAGE TITLE

Figure 3.10 - Annual Increment Modeling Results



COMMENTS: -Results shown for 2007 meteorological data	SOURCES: **349**	COMPANY NAME: **EnviroFocus Technologies, LLC**	
	RECEPTORS: **3295**		ENVIRON
	OUTPUT TYPE: **Concentration**	SCALE: 1:92,194 0 3 km	
	MAX: **9.76816 ug/m^3**	DATE: **7/5/2013**	PROJECT NO.. **07-15422D**

AERMOD View - Lakes Environmental Software

Appendix C
BPIP Input File

```
'EnviroFocus NO2 NAAQS Modeling 2013'
'P'
'METERS'  1.00000000
'UTMY'  0.0000
23
'E17-00'  1            9.14
    8          19.20
             364225.80      3093742.90
             364222.34      3093741.46
             364220.90      3093738.00
             364222.34      3093734.54
             364225.80      3093733.10
             364229.26      3093734.54
             364230.70      3093738.00
             364229.26      3093741.46
'E16-00'  1            9.14
    8          19.20
             364216.30      3093740.10
             364212.84      3093738.66
             364211.40      3093735.20
             364212.84      3093731.74
             364216.30      3093730.30
             364219.76      3093731.74
             364221.20      3093735.20
             364219.76      3093738.66
'E13-00'  1            8.69
    8          19.20
             364186.00      3093823.90
             364182.54      3093822.46
             364181.10      3093819.00
             364182.54      3093815.54
             364186.00      3093814.10
             364189.46      3093815.54
             364190.90      3093819.00
             364189.46      3093822.46
'E14-00'  1            8.68
    8          19.20
             364192.00      3093825.70
             364188.54      3093824.26
             364187.10      3093820.80
             364188.54      3093817.34
             364192.00      3093815.90
             364195.46      3093817.34
             364196.90      3093820.80
             364195.46      3093824.26
'E15-00'  1            8.59
    8           9.10
             364194.90      3093836.80
             364192.28      3093835.72
             364191.20      3093833.10
             364192.28      3093830.48
             364194.90      3093829.40
             364197.52      3093830.48
             364198.60      3093833.10
```

```
                364197.52       3093835.72
'E9-00'  1              9.05
    8             19.80
                364180.80       3093745.40
                364178.18       3093744.32
                364177.10       3093741.70
                364178.18       3093739.08
                364180.80       3093738.00
                364183.42       3093739.08
                364184.50       3093741.70
                364183.42       3093744.32
'E10-00'  1              9.08
    8             19.80
                364182.60       3093739.50
                364179.98       3093738.42
                364178.90       3093735.80
                364179.98       3093733.18
                364182.60       3093732.10
                364185.22       3093733.18
                364186.30       3093735.80
                364185.22       3093738.42
'MAIN1'  1              8.90
    4             8.90
                363995.50       3093766.10
                364007.11       3093728.13
                363983.20       3093720.82
                363971.59       3093758.79
'MAIN2'  1              8.90
    4             8.90
                364018.70       3093758.90
                364026.24       3093734.23
                364006.62       3093728.23
                363999.08       3093752.90
'MAIN3'  1              8.90
    4             8.90
                364036.40       3093787.90
                364058.21       3093716.57
                364033.52       3093709.02
                364011.71       3093780.35
'MAIN8'  1             10.40
    4             7.60
                364262.60       3093851.50
                364290.43       3093760.46
                364231.54       3093742.45
                364203.70       3093833.49
'MAIN9'  1             10.40
    4             7.60
                364291.50       3093860.60
                364306.79       3093810.60
                364277.23       3093801.56
                364261.94       3093851.56
'FLAT1'  1              8.90
    4             8.50
                364058.90       3093716.80
```

```
                364060.83       3093710.48
                364046.10       3093705.98
                364044.17       3093712.30
'FLAT2'  1              8.90
    4             6.10
                364071.20       3093713.70
                364073.01       3093707.77
                364066.70       3093705.84
                364064.89       3093711.77
'FLAT3'  1              8.90
    4             6.10
                364103.30       3093823.10
                364109.18       3093803.88
                364104.31       3093802.39
                364098.43       3093821.61
'PRAXAIR'  1              8.54
    4             8.20
                364282.60       3093885.30
                364282.33       3093870.00
                364254.94       3093870.48
                364255.21       3093885.78
'STMWATER'  1             7.95
    4             3.10
                364017.40       3093884.20
                364016.85       3093852.60
                363947.06       3093853.82
                363947.61       3093885.42
'MAIN4'  1              8.90
    10            17.00
                364104.40       3093802.50
                364098.50       3093821.50
                364062.70       3093810.60
                364066.70       3093797.20
                364036.50       3093787.90
                364060.40       3093710.10
                364071.00       3093713.70
                364073.50       3093705.80
                364125.20       3093721.60
                364100.40       3093801.40
'MAIN5'  1              8.90
    6            16.20
                364154.00       3093818.00
                364160.40       3093797.10
                364154.60       3093795.30
                364174.60       3093731.00
                364126.10       3093715.70
                364099.60       3093801.20
'MAIN7'  1             10.40
    6            15.20
                364204.40       3093833.70
                364192.70       3093830.00
                364199.10       3093808.90
                364165.20       3093798.60
                364185.10       3093733.90
```

```
                364230.70       3093747.90
'PROPANE'  1              8.13
    6             4.57
                364035.50       3093869.80
                364035.80       3093888.00
                364027.40       3093887.80
                364027.20       3093853.90
                364031.90       3093853.70
                364031.90       3093869.80
'BLD9'  1              8.11
    30              6.10
                364044.70       3093937.80
                364061.70       3093937.50
                364061.70       3093935.80
                364086.50       3093935.40
                364086.50       3093929.60
                364097.10       3093929.60
                364097.20       3093925.00
                364098.80       3093925.00
                364098.60       3093921.60
                364121.70       3093920.90
                364121.70       3093919.00
                364127.70       3093918.90
                364127.80       3093916.00
                364130.80       3093916.10
                364130.90       3093912.50
                364128.70       3093912.30
                364128.60       3093909.40
                364121.50       3093909.40
                364121.50       3093901.70
                364118.00       3093901.80
                364118.00       3093899.60
                364111.80       3093899.70
                364111.60       3093897.80
                364099.90       3093898.00
                364099.70       3093897.00
                364044.40       3093897.80
                364044.30       3093903.10
                364039.80       3093903.20
                364039.90       3093920.80
                364044.40       3093920.80
'MAIN6'  1             10.40
    6            13.20
                364165.60       3093798.60
                364154.00       3093795.40
                364173.30       3093736.50
                364178.90       3093738.60
                364176.50       3093744.70
                364181.50       3093746.50
117
'E13'             8.69            20.90        364186.00       3093819.20
'E14'             8.68            20.90        364192.00       3093821.00
'E15'             8.59            10.70        364194.90       3093833.10
'E8'             8.92            39.62       364175.90      3093758.00
```

'E3'	8.59	27.20	364080.80	3093769.10
'E2'	8.62	16.50	364058.10	3093753.40
'E1'	8.42	16.70	364053.40	3093768.50
'E4'	8.38	39.60	364057.20	3093807.00
'Process Stack'				
'E18'	8.12	2.80	364029.90	3093858.40
'Propane Tank'				
'E6'	8.34	39.60	364092.00	3093823.40
'Hygiene Stack'				
'E7'	8.55	39.62	364134.30	3093818.80
'E16'	9.14	20.90	364215.00	3093739.50
'E17'	9.14	20.90	364224.60	3093742.40
'E9'	9.05	12.19	364180.80	3093741.70
'E10'	9.08	21.30	364182.60	3093735.80
'E12'	9.05	3.40	364178.90	3093737.30
'E11'	9.08	6.20	364184.10	3093740.00
'NEW_PL1'	10.97	27.43	364227.35	3093784.81
'10_1'	1.52	10.67	362500.00	3087100.00
'10_2'	1.52	9.14	362200.00	3087200.00
'10_3'	1.52	7.62	362200.00	3087200.00
'11_1'	5.94	4.57	365660.00	3091750.00
'11_2'	5.94	4.57	365660.00	3091750.00
'11_3'	5.03	8.23	365700.00	3091800.00
'12_1'	0.00	15.24	359500.00	3091700.00
'12_2'	1.80	7.62	358540.00	3091700.00
'12_5'	1.80	5.00	358540.00	3091700.00
'13_1'	12.04	4.27	368200.00	3094600.00
'15_1'	19.39	3.66	363600.00	3098500.00
'16_1'	6.21	15.24	364700.00	3093600.00
'16_2'	6.21	15.24	364700.00	3093600.00
'17_1'	0.91	61.26	360200.00	3092210.00
'17_2'	0.91	61.26	360200.00	3092210.00
'17_3'	0.91	61.26	360200.00	3092210.00
'17_4'	0.91	61.26	360200.00	3092210.00
'18_1'	20.10	3.05	364000.00	3098100.00
'18_2'	20.10	9.14	364000.00	3098100.00
'18_3'	20.10	3.05	364000.00	3098100.00
'19_1'	10.90	67.06	368200.00	3092700.00
'19_2'	10.90	67.06	368200.00	3092700.00
'19_3'	10.90	67.06	368200.00	3092700.00
'19_4'	10.90	67.06	368200.00	3092700.00
'20_1'	0.03	3.05	358000.00	3089000.00
'21_1'	4.21	22.86	364000.00	3089500.00
'21_2'	4.21	22.86	364000.00	3089500.00
'21_4'	4.21	10.67	364000.00	3089500.00
'21_5'	4.21	10.67	364000.00	3089500.00
'21_6'	4.21	3.05	364000.00	3089500.00
'23_1'	1.94	2.13	359500.00	3093200.00
'24_1'	11.98	10.36	362800.00	3098300.00
'25_1'	0.01	6.71	359750.00	3090370.00
'26_1'	2.25	3.05	359940.00	3087810.00
'26_2'	2.25	2.13	359940.00	3087810.00
'26_3'	2.25	2.13	359940.00	3087810.00
'26_4'	2.25	3.05	359940.00	3087810.00

'26_5'	2.25	22.86	359940.00	3087810.00
'26_6'	2.25	2.13	359940.00	3087810.00
'27_1'	0.61	2.74	361610.00	3092190.00
'28_1'	11.42	5.00	364300.00	3097640.00
'28_2'	11.42	8.23	364300.00	3097640.00
'29_1'	2.83	5.00	363720.00	3087370.00
'3_1'	1.52	7.62	358100.00	3090400.00
'30_1'	1.52	5.00	361150.00	3089420.00
'30_2'	1.52	5.00	361150.00	3089420.00
'44_1'	5.61	3.05	361885.00	3093420.00
'45_1'	6.21	7.62	364700.00	3093600.00
'5_1'	0.00	5.00	358030.00	3092750.00
'7_1'	7.62	15.24	367300.00	3092600.00
'9_1'	0.00	45.72	360010.00	3087490.00
'9_10'	0.00	18.29	360000.00	3087500.00
'9_11'	0.00	18.29	360000.00	3087500.00
'9_12'	0.00	18.29	360000.00	3087500.00
'9_13'	0.00	18.29	360000.00	3087500.00
'9_14'	0.00	18.29	360000.00	3087500.00
'9_15'	0.00	18.29	360000.00	3087500.00
'9_2'	0.00	45.72	360010.00	3087490.00
'9_3'	0.00	45.72	360010.00	3087490.00
'9_4'	0.00	45.72	360010.00	3087490.00
'9_5'	0.00	45.72	360010.00	3087490.00
'9_6'	0.00	45.72	360010.00	3087490.00
'9_7'	0.00	45.72	360010.00	3087490.00
'9_8'	0.00	18.29	360000.00	3087500.00
'9_9'	0.00	18.29	360000.00	3087500.00
'22_1'	0.61	5.00	360300.00	3091900.00
'59_1'	13.53	11.58	359900.00	3102500.00
'59_2'	13.53	10.06	359900.00	3102500.00
'59_3'	13.53	10.67	359900.00	3102500.00
'59_4'	13.53	10.67	359900.00	3102500.00
'59_5'	13.53	12.19	359900.00	3102500.00
'59_6'	13.53	10.67	359900.00	3102500.00
'59_7'	12.43	10.67	359930.00	3102750.00
'48_1'	0.00	4.57	357600.00	3090400.00
'49_1'	0.30	36.58	356400.00	3091000.00
'49_2'	0.30	36.58	356400.00	3091000.00
'49_3'	0.30	36.58	356400.00	3091000.00
'50_1'	0.25	12.19	358000.00	3089100.00
'51_1'	0.03	6.10	358000.00	3089000.00
'51_2'	0.03	6.10	358000.00	3089000.00
'52_1'	21.39	13.11	362000.00	3103200.00
'52_2'	21.39	15.54	362000.00	3103200.00
'52_3'	21.39	15.85	362000.00	3103200.00
'52_4'	21.39	15.85	362000.00	3103200.00
'52_5'	21.39	15.85	362000.00	3103200.00
'53_1'	1.52	9.14	362200.00	3085500.00
'54_1'	0.30	9.45	359860.00	3088090.00
'54_2'	0.30	4.57	359870.00	3088090.00
'55_1'	0.30	12.19	360100.00	3087100.00
'55_2'	0.30	12.19	360100.00	3087100.00
'55_3'	0.30	4.57	360100.00	3087100.00

'56_1'	1.52	3.05	362810.00	3085710.00
'56_2'	1.52	12.19	362810.00	3085710.00
'57_1'	1.88	3.05	360310.00	3087720.00
'58_1'	0.94	15.24	361480.00	3087200.00
'58_2'	0.94	7.62	361480.00	3087200.00
'58_3'	0.94	7.62	361480.00	3087200.00
'58_4'	0.94	7.62	361480.00	3087200.00
'60_1'	0.00	3.05	358800.00	3086900.00

Appendix D
AERMOD Modeling Files

ENVIRON

Revised NOx Model

EnviroFocus Technologies
Tampa, Florida

July 2013