
Technical Support Document

Definition of important terms used in this document:

- 1) **Designated “unclassifiable”** – an area where EPA could not determine if there was a violation of the 2008 Lead national ambient air quality standard (NAAQS) or a contribution to a violation in a nearby area, because there was insufficient air quality data for both 2006-2008 and 2007-2009 and where additional monitoring data for 2010 could not result in a different designation.
- 2) **Designated “attainment”** – an area which EPA has determined, based on the most recent 3 years of certified air quality data from 2006-2008 or 2007-2009, has no violations of the 2008 Lead NAAQS during 36 consecutive valid 3-month site means; and which EPA has further determined does not contribute to a violation of the 2008 Lead NAAQS in a nearby area and that additional monitoring data from 2010 could not result in a different designation.
- 3) **Designated nonattainment area** – an area which EPA has determined, based on a State recommendation and/or on the technical analysis included in this document, has a violation of the 2008 Lead NAAQS during the most recent three consecutive years of quality-assured, certified air quality data.
- 4) **Prior nonattainment area** – an area that is currently designated as nonattainment or maintenance for the 1978 Lead NAAQS (including both current nonattainment areas and maintenance areas).
- 5) **Recommended nonattainment area** – an area a State or Tribe has recommended to EPA be designated as nonattainment.
- 6) **Violating monitor** – an ambient air monitor whose design value exceeds 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). As described in Appendix R of part 50, a violation can be based on either lead-total suspended particles (Pb-TSP) or Pb-PM₁₀ data and only three months of data are necessary to produce a valid violating design value.
- 7) **1978 Lead NAAQS** – 1.5 $\mu\text{g}/\text{m}^3$, National Ambient Air Quality Standard for Lead promulgated in 1978. Based on Pb-TSP indicator and averaged over a calendar quarter.
- 8) **2008 Lead NAAQS** - 0.15 $\mu\text{g}/\text{m}^3$, National Ambient Air Quality Standard for Lead promulgated in 2008. Based on Pb-TSP indicator and a three-month rolling average. Pb-PM₁₀ data may be used in limited instances, including to show nonattainment.

Florida
Area Designations For the
2008 Lead National Ambient Air Quality Standards

EPA has revised the level of the primary (health-based) standard from 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 0.15 $\mu\text{g}/\text{m}^3$ measured as total suspended particles (TSP). EPA has revised the secondary (welfare-based) standard to be identical in all respects to the primary standard.

Pursuant to section 107(d) of the Clean Air Act, EPA must designate as “nonattainment” those areas that violate the national ambient air quality standard (NAAQS) and those nearby areas that contribute to violations. The table below identifies the counties or portions of counties (or tribal areas) in Florida that EPA intends to designate “nonattainment” for the 2008 Lead national ambient air quality standard (2008 Lead NAAQS).

Table 1: Area Designation

Area	Florida Recommended Nonattainment Counties	EPA’s Designated Nonattainment Counties	Nonattainment area for 1978 Lead NAAQS
Tampa, Florida	None ¹	Hillsborough (partial)	No (Unclassifiable)

Technical analysis for Tampa, Florida

Introduction

This technical analysis for the Tampa Area identifies the partial county with two monitors that violate the 2008 Lead NAAQS and evaluates nearby counties (if appropriate) for contributions to Lead concentrations in the area. EPA has evaluated these areas based on the weight of evidence of the following factors recommended in previous EPA guidance:

- Air quality in potentially included versus excluded areas;
- Emissions and emissions-related data in areas potentially included versus excluded from the nonattainment area, including population data, growth rates and patterns and emissions controls;
- Meteorology (weather/transport patterns);
- Geography/topography (mountain ranges or other air basin boundaries);
- Jurisdictional boundaries (e.g., counties, air districts, reservations, etc.); and
- Any other relevant information submitted to or collected by EPA (e.g., modeling where done appropriately).

¹ In a letter dated October 15, 2009, the State of Florida recommended an area that is encompassed within a radius of five kilometers (km) centered at the Universal Transverse Mercator (UTM) coordinates 364.0 East and 3093.5 North, Zone 17, in Hillsborough County, be designated “unclassifiable” for the 2008 Lead NAAQS. Florida reiterated this recommendation in a letter to EPA dated May 4, 2010.

Figure 1: Hillsborough County Area of Tampa, Florida

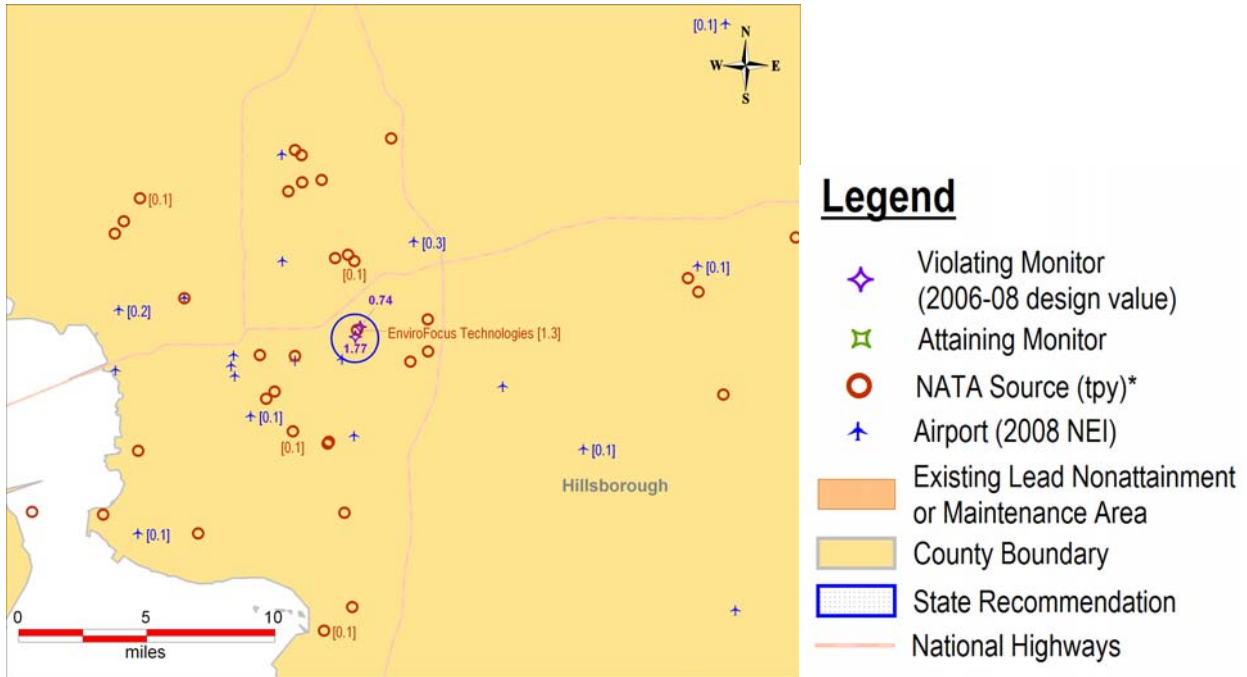
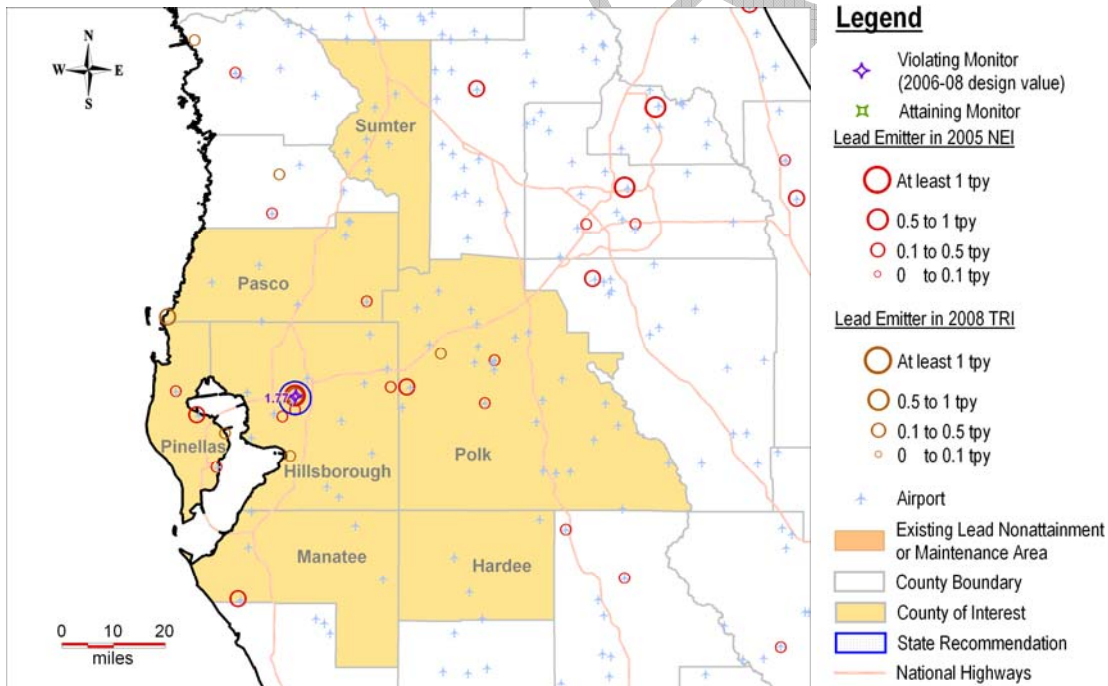


Figure 2: Tampa, Florida Area and Surrounding Counties



Figures 1 and 2 are maps of the area analyzed showing the location and design value of the air quality monitors in the area, the counties surrounding the violating air quality monitors, and Florida’s recommended boundary for an “unclassifiable” designation. The violating monitors in

the Tampa Area are located in Hillsborough County in close proximity to EnviroFocus Technologies (formerly Gulf Coast Recycling), shown in Figure 1.

For this area, EPA previously established Lead unclassifiable boundaries for the 1978 Lead NAAQS that included Hillsborough County located in Florida. For each revision to a NAAQS EPA is required to conduct a separate designation action, which may result in the same or a different nonattainment boundary.

On October 15, 2009, Florida recommended that previous five kilometer (km) area in Hillsborough County that was designated “unclassifiable” remain designated as “unclassifiable,” and the remainder of the State be designated as “attainment,” for the 2008 Lead NAAQS based on air quality data from 2006-2008. This area is located within a radius of five km centered at the Universal Transverse Mercator (UTM) coordinates 364.0 East (E) and 3093.5 North (N), Zone 17, in Hillsborough County. Their recommendation was based on data from Federal Reference Method monitors located in the State, as well as the previous “unclassifiable” designation. Subsequently, on May 4, 2010, Florida reiterated their recommendation for Hillsborough County to be designated as unclassifiable within a radius of five km centered at the UTM coordinates 364.0 East and 3093.5 North, Zone 17, fully including the EnviroFocus Technologies facility.

Based on EPA's technical analysis described below, EPA is intending to designate the entire portion of Hillsborough County, Florida, located within a radius of 1.5 km centered at the UTM coordinates 364104 meters East, 3093830 meters North, Zone 17, fully including the EnviroFocus Technologies facility, as nonattainment for the 2008 Lead NAAQS as the Tampa nonattainment area, based upon currently available information. This county is listed above in Table 1.

Detailed Assessment

Air Quality Data

This factor considers the Lead design values (in $\mu\text{g}/\text{m}^3$) for air quality monitors in Hillsborough County in the Tampa Area, and the surrounding area based on data for the 2007-2009 period. A monitor's design value indicates whether that monitor attains a specified air quality standard. The 2008 Lead NAAQS are met at a monitoring site when the identified design value is valid and less than or equal to $0.15 \mu\text{g}/\text{m}^3$. A design value is only valid if minimum data completeness criteria are met. A Lead design value that meets the NAAQS is generally considered valid if it encompasses 36 consecutive valid 3-month site means (specifically for a 3-year calendar period and the two previous months). For this purpose, a 3-month site mean is valid if valid data were obtained for at least 75 percent of the scheduled monitoring days in the 3-month period. A Lead design value that does not meet the NAAQS is considered valid if at least one 3-month mean that meets the same 75 percent requirement is above the NAAQS. That is, a site does not have to monitor for three full calendar years in order to have a valid violating design value; a site could monitor just three months and still produce a valid (violating) design value.

The 2008 Lead NAAQS design values for Hillsborough County in the Tampa Area are shown in Table 2.

Table 2: Air Quality Data

County	State Recommended Nonattainment	Monitor Name	Monitor Air Quality System ID	Monitor Location	Lead Design Value, 2006 - 2008 ($\mu\text{g}/\text{m}^3$)	Lead Design Value, 2007-2009 ($\mu\text{g}/\text{m}^3$)
Hillsborough County, Florida	No ²		120571073	6811 E. 14 th Avenue	0.74	0.74
			120571066	1700 North 66th Street	1.77	1.77

Monitors in bold have the highest design value.

Hillsborough County shows two monitors violating the 2008 Lead NAAQS. Therefore some area in this county and possibly additional areas in surrounding counties must be designated nonattainment. However, the absence of a violating monitor alone is not a sufficient reason to eliminate nearby counties as candidates for nonattainment status. Each area has been evaluated based on the weight of evidence of the eight factors and other relevant information.

The violating monitors located in Hillsborough County are both located within 480 meters of the largest Lead emissions source in the county, EnviroFocus Technologies, 1901 North 66th Street, in Tampa, Florida. The monitoring objective, according to the EPA monitor locator, is source-oriented. The emissions from EnviroFocus Technologies will be discussed in the corresponding section below.

Emissions and Emissions-Related Data

Evidence of Lead emissions sources surrounding a violating monitor are an important factor for determining whether a nearby area is contributing to a monitored violation. For this factor, EPA evaluated county level emission data for Lead and population data.

Emissions

Emissions data were generally derived from the 2005 National Emissions Inventory (NEI), version 2, which is the most up-to-date version of the national inventory available when these data were compiled for the designations process in 2009. See <http://www.epa.gov/ttnchie1/net/2005inventory.html>. EPA recognizes that for certain counties, emissions may have changed since 2005. For example, certain large sources of emissions in or near this area may have installed emission controls or otherwise significantly reduced emissions since 2005.

Some States provided updated information on emissions and emission controls in their comments to EPA. Florida provided a preliminary determination prepared for EnviroFocus Technologies dated August 2009, which included some emission estimates; however, the source of these estimates was not documented or referenced by Florida. As discussed below, emissions levels at the EnviroFocus Technologies facility are currently in flux as major construction projects are

² In a letter dated October 15, 2009, the State of Florida recommended an area that is encompassed within a radius of five km centered at the UTM coordinates 364.0 East and 3093.5 North, Zone 17, in Hillsborough County, be designated “unclassifiable” for the 2008 Lead NAAQS. Florida reiterated this recommendation in a letter to EPA dated May 4, 2010.

underway. Florida also provided updated emissions information via email for the City of Tampa Wastewater Treatment Plant, noting that actual Lead emissions from that site were less than 100 pounds in 2005.

Table 3 shows total emissions of Lead (given in tons per year (tpy)) for violating counties and potentially contributing facilities in and around the Tampa Area including sources emitting (or anticipate to contribute) greater than 0.1 tpy of Lead according to the 2005 NEI data. There are approximately 20,000 airport facilities in the U.S. at which leaded aviation gasoline is consumed. To evaluate the potential impact of emissions at and near these facilities, EPA recommends that states use the draft 2008 NEI. Data for airport facilities in Hillsborough County which use leaded aviation gasoline are included in Table 4.

Table 3: Lead Emissions for all Non-Airport Lead Emitting Sources in Hillsborough County

County	Facility in State Recommended Nonattainment Area?	Facility Name	Facility Location	2005 NEI (tpy)
Hillsborough County, FL	No*	EnviroFocus Technologies	1901 N 66 th St, Tampa	1.3
	No	Tampa Electric Company	3602 Port Sutton Road, Tampa	0.1
	No	Tampa Electric Company	13031 Wyandotte Road, Apollo Beach	0.1
	No	Coronet Industries Inc	4082 Coronet Road, Plant City	0.3

* In a letter dated October 15, 2009, the State of Florida recommended an area that is encompassed within a radius of five km centered at the UTM coordinates 364.0 East and 3093.5 North, Zone 17, in Hillsborough County, be designated “unclassifiable” for the 2008 Lead NAAQS. This facility falls within that state-recommended boundary.

According to the available data, Hillsborough County has four sources emitting at or above 0.1 tpy. The greatest emitter of Lead in the County is EnviroFocus Technologies. The other sources in the Tampa Area are not expected to contribute to the violations recorded at the air quality monitors, and will be discussed further in the discussion on air quality modeling. The two Tampa Electric Company facilities are approximately 7 km and 18 km away, respectively. Coronet Industries formerly manufactured defluorinated phosphate, but ceased operation in March 2004. Current work on site includes clean-up activities associated with the decommission and shutdown of operations. The Coronet site is approximately 30 km away from the violating monitors.

EnviroFocus Technologies is the current owner and operator of the former Gulf Coast Recycling facility. EnviroFocus Technologies obtained a prevention of significant deterioration (PSD) permit from the State on September 22, 2009, to construct upgrades to the existing battery recycling facility, including enclosing the entire process area, paving and/or removal of contaminated soil, and increasing the production capacity of the facility. The battery recycling operation is continuing while construction activity is ongoing. The State of Florida provided the following detailed construction schedule from EnviroFocus Technologies. Full facility enclosure is on schedule to be completed by October 2010, while all paving will be completed by March 2012.

EnviroFocus Construction Milestones

Start

Finish

Phase 1A

This phase will replace the existing battery breaking, water treatment plant, afterburner, containment room, baghouses, torit systems as well as add the new Reverb furnace, dryer, 2-holding kettles and various site improvements. The two systems will run concurrently while the new systems are started up and tested.

Tilt up walls	7/6/2010	9/16/2010
Roofing	8/11/2010	10/15/2010
Acid mist scrubber	9/16/2010	12/20/2010
Baghouses	10/28/2010	12/13/2010
Torits	10/28/2010	12/17/2010
Hygiene Stack	10/28/2010	12/17/2010
SO2 Scrubber	10/28/2010	12/13/2010
Process Stack	10/28/2010	12/20/2010
Afterburner	8/31/2010	11/29/2010
Reverb Furnace	10/14/2010	11/29/2010
Dryer system	10/14/2010	12/15/2010
Holding Kettles	10/14/2010	12/30/2010
Launch Phase 1A	1/20/2011	2/16/2011

Phase 1B

This phase will include the blast furnace improvements, installation of 4 refining kettles. The blast and kettles will be linked to the new baghouses and torit systems.

Tilt up walls	3/15/2011	4/25/2011
Roofing	4/13/2011	5/20/2011
Blast Furnace	5/5/2011	5/24/2011
Refining Kettles (4)	5/11/2011	5/26/2011
Launch Phase 1B	8/16/2011	8/29/2011

Phase 1C

This phase will include the final 2 refining kettles, Lead lab and control rooms.

Tilt up walls	10/19/2011	10/25/2011
Roofing	11/16/2011	1/19/2012
Refining Kettles (2)	12/1/2011	12/20/2011
Launch Phase 1C	2/10/2012	3/23/2012

Phase 2

This phase will include the build out of the finished goods, spare parts, maintenance, mobile equipment and material transfer room structures.

Tilt up walls	11/10/2011	12/15/2011
Roofing	12/16/2011	3/2/2012
Launch Phase 2	3/12/2012	3/23/2012

Additionally, Florida provided the following photographic documentation of the ongoing construction activities at EnviroFocus:





Although this schedule is not approved in any enforceable permit or rule, it is instructive in helping to define the appropriate boundary for the Tampa Area. All of the activities included in this schedule will take place on EnviroFocus Technologies facility.

Table 4: Airport Facilities Using Leaded Aviation Gas in Hillsborough County

City	Facility Name	Type	2008 draft NEI (tpy)	Distance to Violating Monitor (kilometers)
Tampa	Vandenburg	Airport	0.27	6.69
Tampa	Peter O'Knight	Airport	0.14	8.52
Tampa	Tampa International Airport	Airport	0.22	15.02
Plant City	Plant City Airport	Airport	0.12	21.69

There are four airport facilities with emissions greater than 0.1 tpy. The nearest such airport is more than 6.5 km from the nearest violating monitor, and all of these airports are located beyond the 5 km boundary that Florida is recommending for an “unclassifiable” designation. The State has not provided analyses (such as air quality modeling) to examine the potential impact of lead emissions at these airports on the violating monitor. EPA's preliminary modeling suggests emissions from piston-engine aircraft operating out of Vandenburg and Peter O'Knight airports contribute less than 1 percent of lead concentrations measured at the violating monitor.

Population Data

Table 5 shows the 2008 population for each county in the area being evaluated, as well as the population density for each county in that area. These data help assess the extent to which the concentration of human activities in the area and concentration of population-oriented commercial development may indicate emissions-based activity contributing to elevated ambient Lead levels. This may include ambient Lead contributions from activities that would disturb Lead that has been deposited on the ground or on other surfaces. Reentrainment of historically deposited Lead is not reflected in the emissions inventory.

Table 5: Population Data

County	State Recommended Nonattainment	2008 Population	2008 Population Density (pop/sq mi)	Population Change 2000-2008	Population % Change 2000-2008
Hillsborough County, FL	No ³	1,180,784	1,058	177,518	18

[Source of data: U.S. Census Bureau estimates for 2008 (<http://www.census.gov/popest/datasets.html>) and estimation of the area of U.S. Counties]

Growth rates and patterns

This factor considers population growth from 2000 to 2008. A county with rapid population growth is generally an integral part of an urban area that may have the potential to be contributing to Lead concentrations in the area. Hillsborough County had an 18 percent population change during the eight year time period, which has been considered when determining the nonattainment status of the County. The emissions from EnviroFocus Technologies are not impacted by local population growth. EPA has considered the population growth rate for this area and does not believe that it affects the boundary recommendation.

Emissions Controls

Under this factor, the existing level of control of emission sources is taken into consideration. The emissions data used by EPA in this technical analysis and provided in Table 3 represent

³ In a letter dated October 15, 2009, the State of Florida recommended an area that is encompassed within a radius of five km centered at the UTM coordinates 364.0 East and 3093.5 North, Zone 17, in Hillsborough County, be designated “unclassifiable” for the 2008 Lead NAAQS. Florida reiterated this recommendation in a letter to EPA dated May 4, 2010.

emissions levels taking into account any control strategies implemented in the Tampa Area before 2005 on stationary sources. EPA has received additional information on current emission conditions in Hillsborough County from Florida Department of Environmental Protection (DEP). Based on Florida's October 15, 2009, letter, the high Lead concentrations in the area are localized and attributable to one single facility, a secondary Lead smelter (formerly Gulf Coast Recycling Co., now EnviroFocus Technologies.)

Since 1990, a monitor located near the property has occasionally violated the former NAAQS for Lead (4th quarter 1991). Evidence suggests fugitive Lead emissions from the facility were the source of the violations. Based on this assessment, EPA approved a revision to Florida's state implementation plan (SIP) on September 18, 1996, that included stack emissions standards for various Lead sources in Florida, and also required the State to submit an additional SIP revision providing a source-specific fugitive emissions control plan for the Gulf Coast facility. A plan was developed, and submitted to EPA for approval on December 9, 1999. Following another violation in 2000 (also attributable to fugitive Lead emissions), the Florida DEP committed to EPA that it would require the facility to implement a more stringent fugitive emissions control plan, and submit the revised plan to EPA as a replacement to the 1999 SIP submittal.

The process emissions from the facility were relatively consistent, around 1.0 to 1.3 tpy, while operated by Gulf Coast. The 2005 NEI Lead emissions reported for the former Gulf Coast Recycling facility are consistent with historical emissions from that facility. In 2007, EnviroFocus Technologies purchased the facility, and submitted a new permit application to expand production capacity and completely enclose the facility, while continuing operation. The emissions from EnviroFocus have remained at a similar level during the permitting process and while undergoing the modifications since EnviroFocus purchased the facility, and are also consistent with the expected actual emissions once construction is complete. EnviroFocus listed the expected actual emissions at 1.12 tpy in their permit application, although the allowable emissions will be 0.96 tpy once construction is completed. The expected actual plantwide emissions will drop to approximately 0.82 tpy.

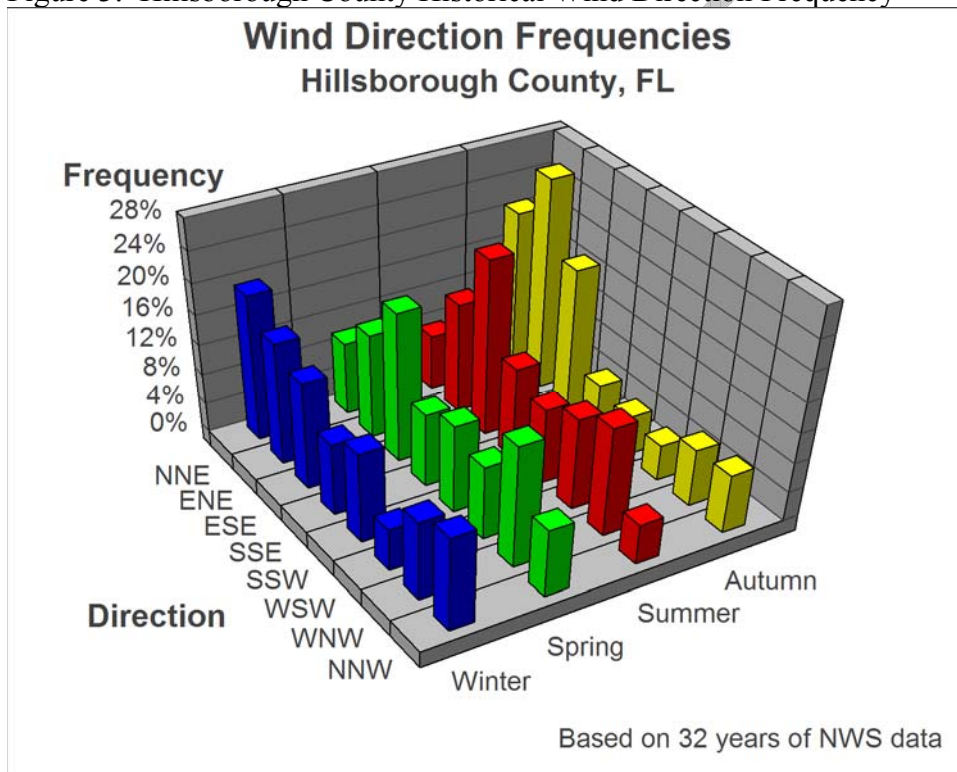
In September 2009, Florida DEP issued the permit to EnviroFocus. The project is expected to significantly reduce the impact of Lead emissions from the facility, and Florida's analysis indicates that the facility will not cause or contribute to violations of the revised Lead NAAQS once the modifications to the facility are completed, even though plant production will increase. The modeling conducted for the new facility reflects the future allowable emissions, at the 0.96 tpy level, rather than the current allowable emissions of 2.0 tpy. The permit includes a fugitive emissions control plan, including removal of contaminated soil and additional paving to reduce reentrainment. It also contains a requirement that the company conduct post-construction monitoring at two additional sites near the facility. While not totally representative of the current operating conditions at EnviroFocus, the modeling is useful for this analysis. The modeling is based on future allowable emissions, but the current actual emissions are similar to future allowable emissions (current actual of ~1.0 to 1.3 tpy vs. future allowable 0.96 tpy). As a result, the modeling is instructive as a factor to help in defining the appropriate boundary for the Hillsborough County area.

Florida DEP has previously indicated its intentions to submit an additional SIP revision to EPA to incorporate the air quality benefits obtained through the project. The SIP revision will fulfill Florida DEP’s commitment to EPA to replace the 1999 submittal with a more effective plan.

Meteorology (weather/transport patterns)

For this factor, EPA considered data from National Weather Service (NWS) instruments and other meteorological monitoring sites in the area, usually associated with major airport operation. A three-dimensional bar chart shows the wind frequencies in eight directions, for the four seasons, based on thirty-two years of historical data⁴ for the Tampa Area. These historical data may provide evidence of the potential for Lead emissions sources located upwind of a violating monitor to contribute to ambient Lead levels at the violating monitor location, in the season of the violation.

Figure 3: Hillsborough County Historical Wind Direction Frequency



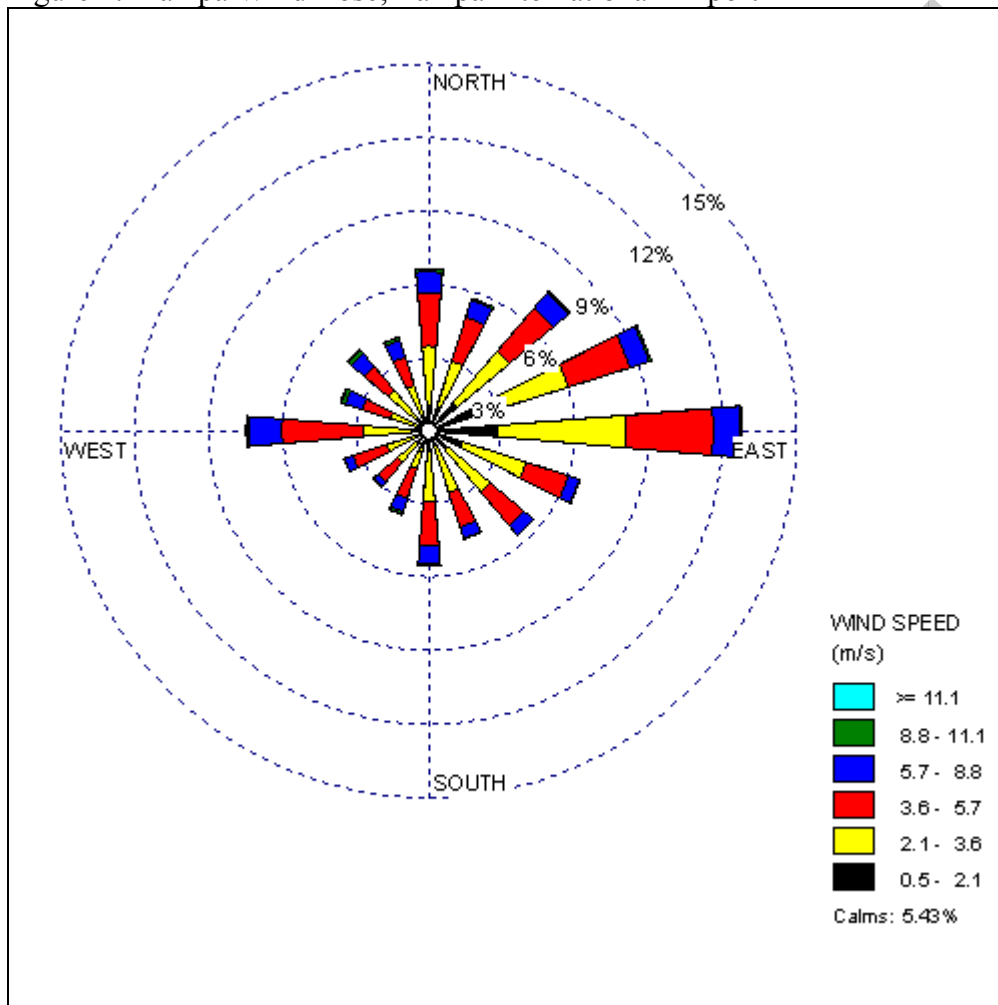
As seen in Figure 3 above, the predominant wind direction in the Autumn/Winter seasons is originating from the North/Northeast (NNE) and East/Northeast (ENE), while in the Spring/Summer seasons it is from the East/Southeast (ESE).

For each air quality monitoring site, EPA also developed a “wind rose,” which provides information about how wind speed and direction are distributed at the NWS monitoring station during the 30-year time period. The “spokes” on the diagram indicate the frequency of winds

⁴ This data was taken from 1960-1992 Solar and Meteorological Surface Observation Network information issued jointly by the U.S. Department of Commerce: National Climatic Data Center and the U.S. Department of Energy: National Renewable Energy Laboratory.

blowing FROM a particular direction. The length of a spoke shows the amount of time (in percentage) that the wind blows from that direction. Each concentric dotted-line circle on the diagram represents increasing frequencies as you move out from the center. The spokes also provide information about the speed of the winds blowing from that direction. Each spoke is broken into discrete frequency categories that are color-coded to indicate the percentage of time that wind speeds are within that category (e.g., for winds blowing from the East, approximately five percent of the time the wind speeds are between 2.1 – 3.6 meters/second (m/s)).

Figure 4: Tampa Wind Rose; Tampa International Airport



Annual Wind Rose – 30 years (1961-1990)

Figure 4 provides an annual wind rose diagram for the Tampa Area. The wind rose was generated from 30 years (1961-1990) of wind speed and wind direction data collected at the NWS meteorological monitoring station located at the Tampa International Airport (NWS Station # 12842), approximately 15 km from the nearest violating monitor. This station has the most representative long-term record of wind data for the Tampa Area, including Tampa’s Lead monitoring site.

The Tampa Area wind rose is consistent with the wind direction bar chart in Figure 3 above and indicates that wind blows predominantly from due East, approximately 13 percent of the time;

however wind is also blowing from the East/Northeast approximately ten percent of the time. The winds blow from each direction at least three percent of the time. The wind speeds also vary with no strongly predominate speed category either. However, the majority of the time, the wind speeds are less than 5.7 m/s. The wind rose indicates that Lead sources located in any direction from the monitoring site in the Tampa Area could influence the monitored ambient air concentrations during different time periods; however sources located to the East/Northeast may have a greater influence. Also, the higher frequency of low to moderate wind speeds would indicate that air emissions sources located closer to the monitor have a larger influence than those located more distant from the monitor.

EPA considered this historical wind direction and wind speed data to show evidence of the potential transport patterns for Lead emissions sources located upwind and/or in close proximity to that of a violating monitor to contribute to ambient Lead levels at the violating monitor.

Geography/topography (mountain ranges or other air basin boundaries)

The geography/topography analysis evaluates the physical features of the land that might have an effect on the air shed and, therefore, on the distribution of Lead over the Tampa Area.

The Tampa Area does not have any geographical or topographical barriers significantly limiting air-pollution transport within its air shed. Therefore, this factor did not play a significant role in determining the nonattainment boundary.

Jurisdictional boundaries

Existing jurisdictional boundaries may be helpful in articulating a boundary for purposes of nonattainment designations, and for purposes of carrying out the governmental responsibilities of planning for attainment of the Lead NAAQS and implementing control measures. These existing boundaries may include an existing nonattainment or maintenance area boundary, a county or township boundary, a metropolitan area boundary, an air management district, or an urban planning boundary established for coordinating business development or transportation activities.

A portion of the Tampa Area was designated as unclassifiable for the 1978 Lead standard on January 6, 1992. That portion of Hillsborough County contains what is now the EnviroFocus facility. However, EPA has concluded that this existing jurisdictional boundary was not based on the same factors as currently being analyzed and does not affect this analysis. Therefore, this factor did not play a significant role in determining the nonattainment boundary.

Other Relevant Information

Florida submitted additional information in support of their recommendation on May 4, 2010, which included some modeling results based on the EnviroFocus Technologies permit application. The new facility, when completed later in 2010, will have multiple controls on its process operations, including operating within a total enclosure under negative pressure. The air modeling results referenced in that permit show that the maximum impact of the EnviroFocus Technologies facility is predicted to be approximately 50 percent of the NAAQS and would

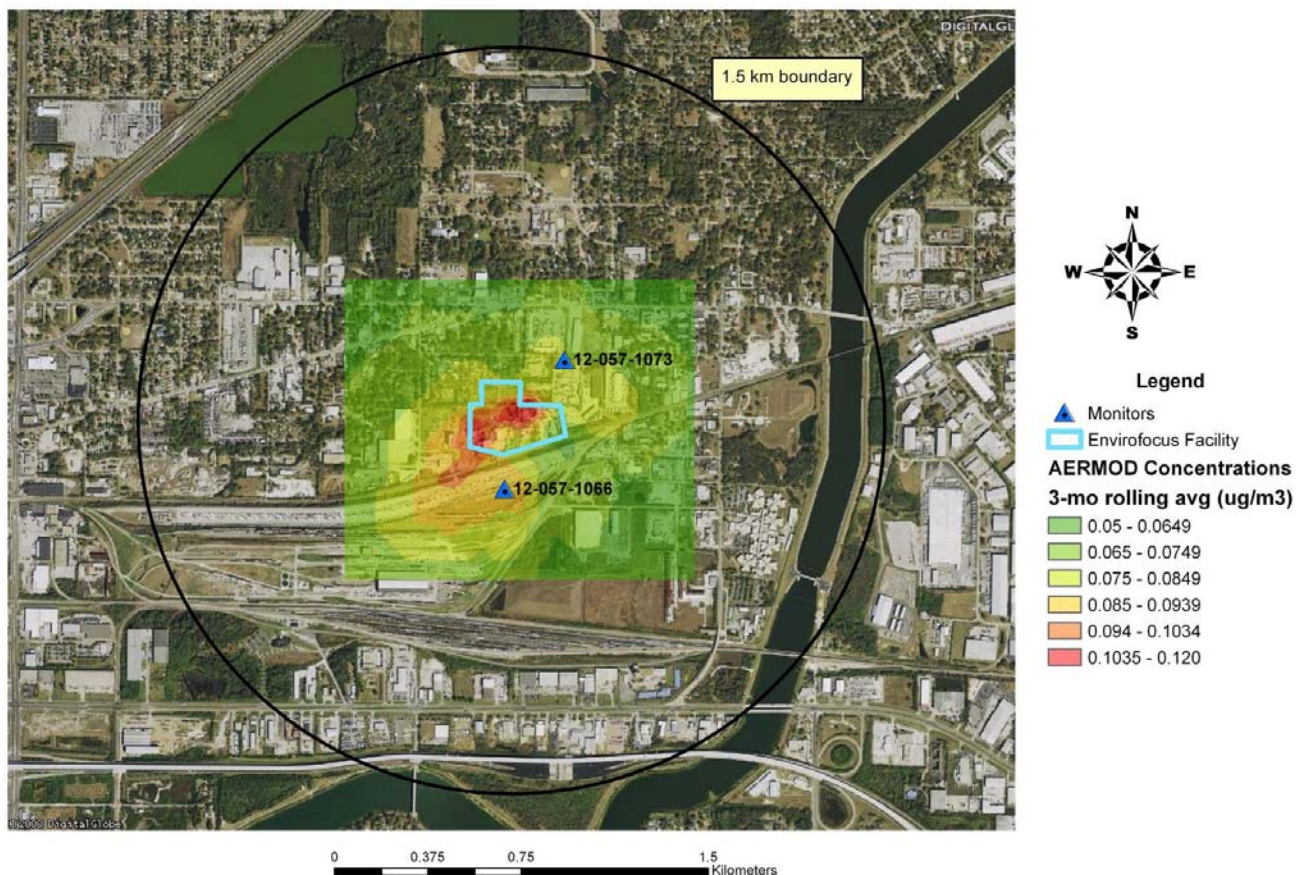
occur at the fence line of the facility. The model output, which includes the impact of all point sources in the immediate area, when combined with an assumed background concentration of $0.05 \mu\text{g}/\text{m}^3$, predicts a maximum concentration below $0.12 \mu\text{g}/\text{m}^3$. Concentrations in excess of the new NAAQS do not extend beyond the fence line of the facility, and drop to approximately 5 percent of the NAAQS level well within a distance of 1.5 km from the facility (see the figure showing modeling results below). However, this modeling does not reflect permitted operating conditions during the monitoring period when violations were recorded. Permitted emissions levels during that period were 2.0 tpy, higher than the future allowable emissions levels used in the modeling, and the modeling does not account for reentrained dust emissions that may have been present during the violation period. Nonetheless, the modeling represents the best estimation available to determine the facility impacts for purposes of establishing an appropriate nonattainment boundary.

Interpreting the modeling analysis for EnviroFocus Technologies is complicated by the unique nature of the current circumstances and the ongoing plant modifications. Since the facility is being rebuilt, the current conditions represent neither the old Gulf Coast Recycling nor EnviroFocus Technologies facilities with all rebuilding complete, but rather something in between. However, the modeled emissions of 0.96 tpy are consistent with the past actual recent emissions in the 1.0 to 1.3 tpy range, as well as the expected actual future emissions of 0.82 tpy. Additionally, the modeled emissions include on-site road fugitive emissions, for which there are no permit limits or estimates on current and past emissions. Road fugitives are expected to drop to approximately 0.0355 tpy.

DRAFT

EnviroFocus Technologies AERMOD Modeling

(After all facility modifications are complete)



In 2008 and 2009, there were violations of the 2008 Lead NAAQS. Florida has indicated that these violations can be attributed to ongoing construction activity at the facility aimed at mitigating future violations, rather than process emissions. The furnace enclosure was the most significant construction project that contributed to reentrained dust emissions, and was completed earlier this year. EnviroFocus Technologies is utilizing a combination of paving and soil removal to address reentrained dust from contaminated soil. Reentrainment was not considered in the future modeling, since emissions should be minimal.

Conclusion

After considering the factors described above, EPA has preliminarily determined that it is appropriate to include a portion of Hillsborough County as the Tampa nonattainment area for the 2008 Lead NAAQS. This area is located within a 1.5 km radius centered at UTM coordinates 364104 meters E, 3093830 meters N, Zone 17, which surrounds the EnviroFocus Technologies facility, and includes a portion of Hillsborough County previously designated unclassifiable for the 1978 Lead NAAQS.

EPA is basing this preliminary nonattainment designation determination and boundary on the fact that Hillsborough County has two air quality monitors that show a violation of the 2008 Lead NAAQS, based on 2007-2009 air quality data. Additionally, the EnviroFocus facility located near the violating monitors emits relatively large quantities of Lead that the EPA believes cause the violations of the Lead NAAQS at those air quality monitors for this period. Available modeling and monitoring data indicates that a boundary a 1.5 km radius centered at UTM coordinates 364104 meters E, 3093830 meters N, Zone 17, which surrounds the EnviroFocus Technologies facility, and includes a portion of Hillsborough County previously designated unclassifiable for the 1978 Lead NAAQS, is a sufficient distance to encompass the area that exceeds the Lead NAAQS.

Based on its consideration of all the relevant, available information, as described above, EPA believes that the boundaries described herein encompass the entire area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the 2008 Lead NAAQS.

DRAFT