UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

NOV 14 2008

Ms. Trina L. Vielhauer, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Ms. Vielhauer:

Thank you for your letter dated August 07, 2008, regarding an application for a Prevention of Significant Deterioration (PSD) permit application for a proposed major modification to the existing EnviroFocus Technologies, LLC lead-acid battery recycling facility located in Tampa, Hillsborough County, Florida. The proposed modification consists of a production capacity expansion project which will include the addition of a feed dryer, reverb furnace, six new refining kettles, as well as three new baghouses. Other equipment including the battery breaker hammer mill, blast furnace afterburner, and soda ash silo will either be modified or replaced to accommodate the proposed increase in lead production rate from 32,000 tons per year (tpy) to 150,000 tpy. The EnviroFocus facility recycles spent automotive and industrial lead-acid batteries, as well as other lead-bearing scrap materials to produce lead ingots. The EnviroFocus facility is also subject to the requirements of 40 CFR Part 60, Subpart L – Standards of Performance for Secondary Lead Smelters, and 40 CFR Part 63, Subpart X – National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.

The Region 4 office of the U.S. Environmental Protection Agency wishes to commend the Florida Department of Environmental Protection (FDEP) on the thoroughness of its technical analysis of the permit application for this project. Our comments on the permit application package are as follows:

BACT Analysis

1. The applicant should provide a summary table which includes particulate matter, nitrogen oxides (NO_x), and lead emissions increases and/or decreases for each new, modified, and existing emission unit associated with the proposed capacity expansion project. If possible, it would be helpful to clarify what portion of fugitive emissions would be considered to be lead dust emissions as well as their particular source. It is presently unclear from the application package which particular production activity, material handling operation, or transportation activity may be contributing to fugitive emissions increases. The applicant should also clarify whether or not emissions limits proposed as Best Available Control Technology (BACT) in Section 4 of the

application, other than those proposed for furnace NO_x emissions, are based in part on actual operational or test data from the Tampa, Eagan, or other similar facility. The collection efficiencies of any ventilation capture equipment, hood collectors, and draft enclosures should also be discussed in the application. EnviroFocus should provide technical references, control equipment vendor information, and background technical and/or economic information and documents which form the basis for determining that add-on controls are infeasible for control of lead smelting blast/reverb furnace and kettle refining NO_x emissions. Catalyst poisoning and ammonia slip are common considerations in the application of selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) control technologies to many processes. The potential for a common problem does not by itself eliminate additional consideration of well established control technologies without additional technical justification. The BACT analysis for emergency generator NO_x emissions should also include a discussion regarding the feasibility of combustion modifications such as ignition timing retard and turbocharging/aftercooling. The applicant should also clarify whether or not pollution prevention options have been considered in the application.

2. In several subsections in Section 4 of the applicant's BACT analysis, the proposed BACT emission limits are described as one third the allowable Reasonably Available Control Technology (RACT) concentration limit, one half the Maximum Available Control Technology (MACT) limit, the New Source Performance Standard (NSPS) limit, or one quarter the NSPS limit. It should be noted that proposing an emission limit equal to or below a limit established within a separate regulatory requirement does not reduce a source's obligation to perform a complete top-down facility specific BACT analysis per the requirements of the PSD regulations. As technology becomes available and improves, BACT emission limits are continuously reduced. It is incorrect to assume that limiting an analysis to existing control strategies required to comply with either NSPS or National Emission Standards for Hazardous Air Pollutants (NESHAP) limits simplifies the BACT analysis process. The technical and economic feasibility of presently available as well as innovative control options more stringent than those considered during the development of NSPS or NESHAP requirements must be evaluated on a case-by-case basis. A significantly lower emission limit may be determined BACT for a particular process due to improvements in technology and technology transfer long after the promulgation of a NSPS or NESHAP rule. The final rule for the new and existing secondary lead smelters NESHAP was promulgated on June 23, 1995.

3. The lead monitored background concentration of 0.47 ug/m_3 exceeds the new lead National Ambient Air Quality Standards (NAAQS) of 0.15 ug/m_3. The new lead standard should be taken into consideration and addressed in the application.

4. The permit application did not contain an environmental justice analysis. Due to the nature of the operation at this facility and its location, we suggest that an

environmental justice analysis be conducted either by the applicant or the State. The potential impacts of the construction and operation of the facility should be evaluated against the pollution contribution of the facility to the area, and its effect to the surrounding communities. A determination of whether this contribution constitutes a disproportionate burden to the community should be included in the preliminary determination issued with the draft permit for this facility.

EPA has developed several guidance documents and web-based tools to evaluate potential environmental justice areas. Both the guidance documents and the web-based tool kit can be accessed at http://www.epa.gov/compliance/resources/policies/ej/index.html. Also, you can contact Gracy R. Danois, APS EJ Specialist, at 404-562-9119, for additional assistance with this matter.

Air Quality Analysis

1. Project Emissions – The following are comments on the estimated project emissions from the proposed expanded facility.
   - The emissions factors developed from stack tests at the modernized Eagan, MN facility were used to estimate the emissions from the facility after the proposed expansion. The expected actual lb/hr and tons per year (TPY) are presented as well as limiting levels. For lead, the limiting levels, which are the requested allowable rates, are from 1.44 to 18 times the expected actual values. [Note the plantwide total limiting level for lead is 3.7 times the expected actual value.] Given the existing ambient lead levels and the lower new lead NAAQS, it is suggested that the difference between these emission rates be minimized.
   - Except for NO_2, the Table 2-1 short-term hourly emission values appear to have been derived from the annual TPY. The difference for the NO_2 emissions should be explained. The short-term rates should be included as permit limits.

2. PM2.5 Emissions – The application does not address PM2.5 emissions. The anticipated PM2.5 emissions and NAAQS compliance should be addressed in the application. If PM10 is used as a surrogate for PM2.5 compliance assessment, both the 24-hour and revoked annual standard should be used.

3. Significant Impact Area (SIA) – The SIA assessment was performed with grid spacing of 200-m resolution. Confirmation is needed that the SIA was determined from the largest distance from the facility to where all concentration are less than the significant impact levels (SIL) (i.e., concentrations equal to the SIL are significant).

4. Site Boundary – Confirmation is needed that the site boundary has barriers to public access (e.g., fence) and there are no public right-of-ways through the property.

5. Inventory Other Sources – The following are comments associated with the inventories of other sources used in the cumulative NAAQS and PSD compliance modeling.
- The annual potential emissions for other emission sources provided in Table 5-14 were indicated to be the minimum from those presented as annual potential, annual allowable and annual emissions derived from hourly potential and hourly allowable emissions. Either the maximum potential value or the annual allowable emissions should be used in this table for all pollutants.
- The basis for the short term emission rates provided in Tables 5-15, 16, 17, and 18 should be provided. For example, the emission rates provided in the inventory for NO_2 increment assessment (Table 5-18) are less than those provided in Table 5-16 for the same unit.
- Because Table 5-17 PM10 inventory is for both the NAAQS and PSD increment compliance assessment, it appears that the PM10 potential emissions were used for both assessments. If this is true, the separate and different NAAQS and increment modeling summaries provided for PM10 (Table 5-21) should be explained.
- All sources within the SIA should be included in the modeled inventory. Review of Table 5-14 reveals that some sources within the SIA were eliminated.
- The existence of duplicate records and how these were treated should be explained.
- Many sources identified to be included in the modeled inventory for NO_2 and PM10 (Tables 5-16, 17, and 18) were not modeled because of "incomplete source information". For example, the NO_2 NAAQS inventory (Table 5-16) had a total of 3,734.4 TPY that were not modeled. This total does not include eliminated sources located within the SIA. It appears that the number and magnitude of the emissions not modeled warrant further investigation to obtain or estimate the missing information.
- Table 5-18 containing the inventory of other NO_2 PSD increment sources should be a subset of the NAAQS inventory in Table 5-16. Table 5-18 contains two sources not in Table 5-16 (i.e., Cultrale Citrus Jucies and Cemetery Management). The basis for the development of this increment inventory, and associate emissions, should be provided.

6. Results of Compliance Modeling – The following comments are associated with the compliance modeling.
- All NO2 compliance assessments use the 0.75 conversion factor of NO_2 to NOx. This factor is only applicable if the modeled rate is for NOx emissions. If NO_2 emission rates are used in the modeling, it is not appropriate to use a conversion factor.

- Confirmation is needed that controlling concentrations, and concentrations challenging the controlling concentrations, were modeled to 100-m resolution.

7. Additional Impact Assessment – The following are associated with the additional impact assessment.
- Visibility Impacts – The visible plume impacts to visibility sensitive receptors within the SIA were not addressed. Only Class I area visibility assessments were provided.
- Soils and Vegetation – The document "A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals" (EPA 450/2-81-078; December 1980) provides exposure to ambient air concentrations. These are suggested for use in this assessment

If you have any questions concerning the BACT analysis related comments in this letter, please contact Heather Abrams at 404-562-9185. If you have any questions concerning the air quality analysis related comments in this letter, please contact Stan Krivo at 404-562-9123.

Sincerely,

Gregg M. Worley

Gregg M. Worley
Chief
Air Permits Section