AIRregs
Air Pollution Regulatory Services, Inc.
Serving minimills since 1979
3025 Windward Plaza, Suite 300, Alpharetta GA 30005
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Bob Geddis, Air Permit Specialist

April 8, 1999

Express mail

John Reynolds
New Source Review Section
Florida Department of Environmental Protection
Division of Air Resources Management
Twin Towers Office Building, 2600 Blair Stone Road
Tallahassee FL 32399-2400

Dear Mr. Reynolds:

This responds to your concern about the two EAF shop baghouses being able to achieve a grainloading lower than the current permit and NSPS limit of 0.0052 gr/scf, which is the limit we proposed in our recent PSD application. AmeriSteel's Michael Leuck indicated that he may agree to a significantly lower allowable grainloading averaged for both baghouses, but he has some concerns. We feel that AmeriSteel's current permit allowable of 0.0052 grains/scf has always represented NSPS and BACT for the two existing shaker-type baghouses. We would agree that newer, reverse-air baghouses can more readily achieve lower rates. Mr. Leuck may agree to a 20 percent reduction in the average allowable grainloading, so the new "combined" allowable would be reduced to 0.0042 grains/scf. This more stringent grainloading limit will further reduce the modeled ambient impact, which is already below the PSD significance levels.

On March 16, 1999, we sent you and Cleve Holladay baghouse calculations showing that the 1997 Method 5 stack tests conducted for Baghouse 1-2 showed 0.0024 gr/scf and the 1998 tests for the same baghouse showed 0.0020 gr/scf. Therefore, our new BACT limit would be about double the tested rates. Mr. Leuck is reviewing test data for the baghouses in an attempt to assure AmeriSteel management that the added risk of committing to a more stringent limit is acceptable for their baghouse systems. Unfortunately, this small "paper" decrease will not affect our low actual emissions that are due to AmeriSteel's exemplary baghouse maintenance.

We ask you to draft the permit condition to allow AmeriSteel to immediately adjust the baghouses in the unlikely event that a Method 5 test should yield an *average* grainloading above 0.0042 but below 0.0052 grains/scf. Please refer to the similar "action level" provision in the Trico Steel PSD permit, enclosed. Trico Steel is a new "greenfield" minimill with a new baghouse system. We would like the permit condition to clearly state that the *average* of the grain- loadings from both baghouses shall not exceed 0.0042 grains, so one baghouse could be at 0.0044 if the other baghouse is below 0.0040. If we later find that maintaining the baghouses to meet the more stringent limits is becoming economically or technical infeasible, we will request "re-BACT" relief in accord with Florida NSR/PSD rules.

While your desire to tighten limits from our baghouses is consistent with the intent of PSD and BACT, reducing the NSPS-allowable will place AmeriSteel in greater legal risk. "Ratcheting" also lessens the incentive for steelmakers to modernize and it penalizes companies like AmeriSteel for doing better than the law requires. Companies with poor maintenance programs are less likely to be pressured to commit to tighter limits or take on greater legal risk. Such companies are even less likely to trigger NSR rules in the first place.

As stated, the air pollution control system and emission limits described in our application meet BACT at 0.0052 gr/scf. The incremental cost for the 20 percent improvement over 0.0052 gr/dscf may exceed the cost effectiveness criteria for determination of BACT under top down review. Refer to the preamble for the latest NSPS Subpart AAa Final Rule, which supports the 0.0052 limit, and to the enclosed agency analysis of Birmingham Steel as discussed below.

At 0.0052 grains, both baghouses represent essentially the same BACT control system that has been approved by many agencies during the past 20 years or so. The Florida DEP approved this design in AmeriSteel's previous PSD application to increase production to 600,000 tons a year. Refer to the Florida DEP's July 7, 1995 Approval of Permit contained in Appendix C which is the 1995 PSD Permit and Final Determination. Also, the canopy hood is designed to capture 99 percent of emissions that escape the EAF and AmeriSteel had improved the sealing of the melt-shop roof under the previous PSD permit, further reducing atmospheric emissions and ambient impact. We are not changing any process or control device to the extent that the previous Florida DEP analysis would be affected. Page 3 of that analysis concludes:

> "The [presently-installed EAF] baghouse will meet an emission standard of 0.0052 grains/dscf, the new source performance standards for steel works. The BACT Clearinghouse document lists similar determinations for steel mills in other states. The cost of replacing the filters in these baghouses with ones that may result in lower emissions of particulate matter (0.0018 gr/dscf) is estimated at $15,690 per ton of particulate matter removed. This cost is above the guidelines used by the Department to justify the additional air pollution control."

As we discussed, the NSPS performance level of 0.0052 gr/dscf was recently approved by the Memphis/Shelby County agency as BACT (see enclosed) for the new baghouse system serving the Birmingham Steel meltshop near Memphis, Tennessee. NSPS Subpart AAa applies this baghouse opacity limit to the "affected facility" which is the EAF. However, our baghouses control emissions not only from the EAF but also from the meltshop building.

We trust this decrease in grainloading for both baghouses resolves your concerns. Please call me or Dr. Bob Sholtes (904/964-8440) if you have questions. We appreciate your consideration.

Sincerely,

Robert R. Geddis

Robert R. Geddis

cc: Michael A. Leuck
Robert S. Sholtes, Ph.D., P.E.

CC: File
Duval Co.
EPA
NED
F&W

Baldwin.cor/PSDapp/RRG

John
My colleague Bob Chalfant and I have been writing this column for five years. Like me, Bob comes from the regulatory side - Georgia EPD - and, as you can tell - we're becoming more concerned with the difficulty in resolving PSD issues.
- Bob Cheddar

John Reynolds

new technologies ter regulations

ers will materiiveness. edicted feature, egional age and

conomic and strategic pressures. Mills are increasing oxygen usage, producing improved steel grades by using computerized chemistry models, and reducing energy consumption by employing batch-shaft preheaters and continuous-charge preheaters.

By ROBERT V. CHALFANT

There's an increased need to document the environmental performance of new processes and instruct the regulators.

Companies are building commercial plants with new processes for producing clean-iron units (direct-reduced iron [DRI], iron carbide, pig iron, hot metal). These include free-standing market producers and on-site supplemental producers. All these efforts focus on getting the lowest-cost liquid metal in the ladle while meeting product-quality criteria for an individual facility.

These evolving technologies often are being commercialized from pilot studies or limited-production units. Environmental criteria have been secondary to the technology's development and product's performance.

In the future, companies will have to place more emphasis on environmental performance and benchmarking, especially in the U.S. The Prevention of Significant Deterioration (PSD) construction-approval process places a specific legal responsibility on the facility to document and employ best available control technology (BACT) to control emissions. BACT emphasizes environmental and economic impacts and requires companies to assign specific emission-performance levels for each regulated pollutant.

We have an inability to predict emissions accurately for new or evolving technologies; meanwhile, the regulatory process is becoming increasingly fixated on specific performance values. The new $PM_{2.5}$ particulate standard and more stringent ozone standard will evolve into regional compliance strategies and lower emission limits. The federal land managers responsible for our national parks and wilderness preserves have increased authority to intervene in new-source permitting. In recent years some of the most substantive comments and strongest objections to new-source permits have come from parks authorities.

This past summer was the worst on record for air pollution in the Great Smokey Mountains National Park as a result of the hot, dry conditions. Although most emission reductions will have to come from power plants and automobiles, the air-pollution levels of last summer are bound to result in more stringent permitting criteria.

Regulators have nearly absolute authority in the permitting process. In a recent minimill permitting process, a regulator identified several control technologies that he wanted to see installed, even though they had never been employed at a steel mill. These included a dense-bed NO_x and CO catalyst after the EAF bag house and a new NO_x catalyst that was only operational at the co-inventor's facility on a gas turbine for the reheat furnace. The applicant had to make a significant effort to address technological applicability and costs and demonstrate to the agency that these techniques weren't applicable.

We as an industry have an increased need and responsibility to document the environmental performance of these new processes and instruct the regulators. These are not easy tasks. Even on evolutionary EAF changes, performance is more variable than expected. Several new EAFs with scrap preheating exceeded the equipment supplier's predicted emission performance at startup.

Operating facilities also have resisted documenting existing facility-performance capabilities for fear that data could be used inappropriately to tighten limits. Even Midrex, whose process is used at more DRI facilities worldwide than any other company's, has had difficulty getting into operating sites to gather data, says Gary Metius, manager of technical sales at Midrex. This, and the fact that each equipment unit within a process facility may cost tens of millions of dollars, makes it expensive and difficult to trial-design alternatives that may advance emission performance.

In the iron-reduction projects I've worked on, we've had to address the risk of meeting imposed performance limits and the need to buffer production capacity without overly inflating potential emissions. Lockwood Greene currently is working with Tecnored and North Star Steel in addressing these issues. A modular slice of a full-scale hot-metal production unit that uses the Tecnored process is being operated at Tecnored's technical center in Brazil. The scaleup unit will be the first of its kind in industrial operation. Permitting will have to predict and establish appropriate emission limits for this new technology and for the modified EAF receiving the hot-metal charge. A significant part of permitting will be negotiating with the agency to establish reasonable permit conditions that bridge the gap between documenting BACT while securing the necessary flexible limits that minimize compliance jeopardy for the new facilities.

The steelmaking and environmental arenas are changing. For these new steelmaking technologies to receive approval in this increasingly stringent regulatory environment, environmental issues will have to be addressed alongside economic and strategic considerations as we advance the steelmaking process. ❑

Robert Chalfant is manager, air quality services, Lockwood Greene Technologies. Feel free to call him at 404-654-4421.

Chalfant Virginia, by Geddes + Chalfant from Reg III Phila.

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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September 22, 1995

Mr. Robert R. Geddis
Air Permit Consultant
Lockwood Greene Technologies
INFORUM, Suite 4000
250 Williams Street
Atlanta, GA 30303-1036

Dear Mr. Geddis:

Enclosed is a copy of the Air Permits and response to comments from the Air Permit files for the Trico Steel Company facility which you requested.

If you have any questions concerning the enclosed information, please call me at (334) 271-7861 in Montgomery.

Sincerely,

George Cox
Engineering Services Branch
Air Division

GMC:gmc

enclosure

Response to Comments on ADEM's
Proposed Air Permit for
Trico Steel Co.

Below is the reconciliation of all comments received during the public comment period, at the public hearing, and within the additional period following the hearing:

1. The application contained an arithmetic error which lowered the estimated incremental cost of control of particulate matter from S4,100 dollars per ton to $2,900 dollars per ton.

⇒ Response: The commentor is correct. The applicant provided a calculation which showed the annual cost of incremental waste disposal to be S102,000 per year. The correct result was $10,200 per year. (see item 2)

2. Several comments, both at the hearing and in writing, advocated that ADEM should conclude that BACT for PM_{10} should be set at 0.0020 gr/dscf rather than at 0.0032 gr/dscf.

⇒ Response: ADEM has carefully reviewed the comments on this issue and, based on the following factors, will issue the permit with a BACT level of 0.0032 gr/dscf:

a) The incremental cost per ton of pollutant emitted, after an arithmetic error was corrected, was $2,900 per ton, which is still higher than required by ADEM of other applicants in past permitting actions.

b) Impacts on the National Ambient Air Quality Standards and PSD increments are acceptable.

c) At 0.0032 gr/dscf, filtration efficiency of the baghouse is expected to be above 99.8%.

d) Investigation by ADEM and further information provided by the applicant reveals that the proposed BACT level of 0.0032 gr/dscf is in the lower tier of required levels for similar sources across the country (i.e., those facilities with a stack and subject to PSD requirements). Attached is a table showing the results of ADEM's inquiries.

e) Subsequent information provided by the applicant indicates that the 0.0020 gr/dscf level is not achievable with current filter technology. The applicant provided information which shows that the vendor's guarantee will be 0.0032 gr/dscf.

f) Information provided by the applicant indicates that a level of 0.0026 gr/dscf can be achieved at start-up and after extensive baghouse maintenance, but not on a continuous basis.

Based on the above, ADEM will issue a Permit with a BACT level of 0.0032 gr/dscf, but with additional provisions requiring that the baghouse be maintained so that a level of 0.0026 gr/dscf is met to the greatest extent possible. Should any emission test performed by Trico show emission levels above 0.0026 gr/dscf, immediate corrective action and retesting will be required by the permit.

3. ADEM did not consider the toxic nature of the emissions from the furnace in its preliminary determination of the grain loading standard.

⇒ Response: ADEM did conclude in its preliminary determination that the toxic components of furnace emissions should pose an insignificant risk to public health. ADEM located references which showed that the make-up of electric arc furnace dust consists mainly of low toxicity compounds such as silicates, sulfates, iron oxide, and organic carbon, with lower levels of toxic metals and other metallic oxides. ADEM then performed an analysis of the expected risk to public health from the trace metals and metal oxides. This was done by estimating the emission levels of these specific compounds, running dispersion models which estimate ground level concentrations based on the stack parameters and emission rates, and comparing these concentrations to fractions of workplace exposure standards (TLV's). Attached are excerpts from ADEM's preliminary determination which provide details of the results.

4. ADEM should not allow Trico to consume 88% of the 24-hour PM_{10} increment because future plant and job expansion would be severely limited.

⇒ Response: While it is true that Trico would consume 88% of this increment, it must be understood that this is the <u>maximum</u> level of consumption occurring at <u>any</u> specific point surrounding the plant site and for the worst (from the standpoint of meteorological conditions) day in five years. This particular point is at the south-southwest fence line of the property. Plant expansion or new construction would be constrained by this location and level of increment consumption only if the new project were near the proposed Trico site to the north-northeast and was a significant emitter of PM_{10}. Please refer the attached isopleths of increment consumption by Trico.

5. "ADEM's Preliminary Determination shows computer modeling done by both ADEM and E^2M that both demonstrate serious violations of the NAAQS and PSD increments in the Decatur area for many of the pollutants that will be emitted by Trico. Yet, ADEM goes on to state that Trico will not be a significant contributor to these violations. Why are there violations occurring here in the first place? What actions will ADEM take to determine if these violations are, in fact, occurring and then to remedy them and hold the proper parties responsible? If these violations shown by the computer models are in fact occurring, then ADEM's determination that Decatur is an attainment area is incorrect, and ADEM will need to address this situation."

Emission Limitations of Companies with Similar Designs

Company Name	Location	Grain Loading (gr/dscf)
Tuscaloosa Steel Company	Alabama	0.0035
Beta Steel	Indiana	0.0052*
Nucor	South Carolina	0.0035
Mac Steel	Arkansas	0.0018**
IPSCO Steel, Inc.	Iowa	0.0040

* Beta Steel uses a scrubber for a control device but uses the same emission test method that will be utilized by Trico.

** Mac Steel retrofitted a stack onto its positive pressure baghouse and has not complied with limit.

SUMMARY OF PARTICULATE MATTER EMISSIONS

BIRMINGHAM STEEL CORPORATION
MEMPHIS, TENNESSEE

ELECTRIC ARC FURNACE
New Source Performance Test
(40 CFR60.2 NSPS AAa)

August 24-26, 1998

AMBIENT AIR SERVICES, INC.
106 AMBIENT AIR WAY
STARKE, FLORIDA 32091
(904)964-8440

1.0 INTRODUCTION

On August 24, 1998 through August 26, 1998, Ambient Air Services, Inc. of Starke, Florida, conducted particulate matter emission measurements on the baghouse stack and visible emissions observations on the baghouse stack, meltshop building and dust loading system.

These tests were performed to satisfy a portion of the conditions of Permit Number CD-0710-01PC. The testing was to demonstrate compliance with the requirements of 40CFR60.272a and was conducted in accordance with 40CFR60 NSPS AAa requirements.

The test methods used for particulate matter and lead emission measurements were EPA Methods 5d and 12. EPA Method 9 was used for visible emissions observations. All methods used are as described in 40 CFR 60, Appendix A.

Prior to the test date, the Memphis-Shelby County Health Department was notified of the test schedule. Ms. Thuy Le of the Memphis-Shelby County Health Department was on site during a portion of these tests.

Table I summarizes the results of these tests

TABLE 1

SUMMARY OF COMPLIANCE TEST RESULTS BIRMINGHAM STEEL CORPORATION MEMPHIS, TENNESSEE August 24-26, 1998			
SOURCE	**POLLUTANT**	**PERMIT LIMIT**	**TEST RESULTS**
EAF/Caster Baghouse	Particulate	0.0052 GR/SCFD	0.00095 gr/DSCF
	Visible Emissions	3%	0.0%
	Lead Emissions	1.2 lbs/hr. and 5.27 tons/year	0.019 lbs/hr. and 0.08 tons/year
Dust Loading	Visible Emissions	10%	0.0%
Melt Shop Building	Visible Emissions	6%	0.0%

6.0 TEST COMPROMISES:

During the testing project the operation of the furnace was sporadic. This is due in large part to the process of making steel and not to the actual breakdown of the furnace. When other parts of the total process have mechanical problems, the furnace must sometimes stop production. This was the case during this phase of the compliance testing.

Due to the inordinate amount of down time during run 1 and 2, it was decided to suspend any attempt at completing run 3 of these tests. Therefore, this test report is a reflection of the average results obtained during only 2 test runs for particulate and lead. The following is a chronology of the sampling time and down time during each run:

8-24-98 Plant down until 1554

1554	Start test run number 1
1637	Plant down indefinitely - secured equipment

8-25-98 Plant down until 0923

0923	Restart run number 1
1145	Plant down - stop test
1212	Restart test
1335	Completed run number 1

Plant down early afternoon

1637	Start run number 2
1855	Plant down
2031	Restart test
2105	Plant down
2202	Restart test
2237	Plant down
2345	Restart test

8-26-98	0027	Plant down
	0159	Restart test
	0222	Completed run number 2

Sometime during the morning of August 26, 1998 the plant was shut down for maintenance. It was not brought back on line until August 28, 1998. Equipment was in place to start Run 3 at 0600, August 28, 1998. The plant was not able to run during the morning and at mid-day the decision was made by Memphis-Shelby County Health Department to suspend further testing.

This supplement is provided to the Air Pollution Control Section Memphis and Shelby County Health Department and constitutes written response to the comments submitted by EPA Region IV on the subject application, said comments being in the form of a letter dated June 3, 1996 from Jewell A. Harper. The responses are coded by page and item number in correspondence to the June 3rd letter.

Page 1, Item 1 - BACT Particulate Grain Loading:

Birmingham Steel Corporation at its proposed Memphis Mill will install state-of-the-art fabric filtration coupled with direct furnace evacuation. No party to these negotiations has suggested that Birmingham Steel is proposing less than state-of-the-art technology and equipment.

Birmingham Steel contends that the recent series of ever decreasing grain loading limits do not reflect reality and the trend cannot be sustained as these magnitudes approach unreasonably low levels.

The applicant has extensively presented the case that the existing lower grain loading limits have not for the most part been proven to be sustainable. Additionally, it has been demonstrated that proposed lower limits are not economically justifiable. There is a distinct trend to have each new installation agree to yet a little lower limit than the last applicant permitted.

As part of its site selection process, Birmingham Steel surveyed numerous areas in the eastern United States, looking for a sites readily accessible to rail, highway and river transportation modes that would also be in an environmentally acceptable situation to receive a new steel mill. The proposed mill site would be required to have ready access to a significant source of electrical energy and natural gas to power the proposed operations. The site would have to be located such that the placement of a new mill would not have adverse affect upon the area and the populace.

The Memphis area was determined to be an area with all of the attributes desired for the preliminary determination. The final determination of site qualification was based upon several other factors, including the costs of doing business in the area. Among the costs considered were business taxes, freight and labor costs for the workforce. The choice was made considering the differential between the current costs involved with purchasing billet and bloom for other Birmingham Steel mills from non-domestic steel mills and the proposed costs for the Memphis mill. The Memphis site had a small advantage financially over the current practice and led to selection of the site.

From very early on in the process of site selection Birmingham Steel has been meeting with the Memphis and Shelby County Health Department regarding the development of a PSD permit for this site. The Department as required by the applicable regulations performed a BACT determination for PM emissions from the proposed plant. BACT is defined in Tennessee and federal regulations as follows:

> "[BACT] shall mean an emissions limitation . . . based on the maximum degree of reduction of each pollutant subject to regulation under the [Clean Air Act] which would be emitted from any proposed stationary major source . . . which the Director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source . . . through application of production processes and available methods, systems, and techniques . . ."

The Department performed such an examination and determination utilizing a number of different analytical approaches and technical inputs in considering a number of different control technologies. The result of the Department's effort was a determination that BACT for PM for this source is an emission

limit of 0.0052 gr/dscf TSP which is achieved by using a positive pressure baghouse.

The requirement of the application of BACT does not require application of the most restrictive limitation possible. Rather, the Department must and did balance the factors of energy, economics, environmental impacts and other costs, on case-by-case basis. The Department was well aware of the permitting decisions in other states including: Alabama (TRICO and Tuscaloosa Steel), Arkansas (Nucor). The merits of the PSD permit issued to IPSCO in Muscatine, Iowa by the Iowa Department of Natural Resources were also considered; IPSCO was permitted at 0.0052 gr/dscf TSP. The Department was also aware of the unique features of the proposed Memphis mill and significant differences from the mills in other states. Some of these more important differences include: inclusion of the emissions from the arc furnaces, the ladle metallurgical furnaces, the melt shop fugitive emissions, the continuous casters, the tundish lancing stations, ladle repair stations and the rolling mill bloom scarfer in the emissions stream to a single baghouse rather than multiple baghouses used at other mills.

The record developed by the Memphis and Shelby County Health Department is clear that in the full consideration of different feasible control technologies, the Department determined that a positive pressure baghouse with a ridge ventilator with a grain loading of 0.0052 gr/dscf is the BACT for the Memphis plant.

It is also appropriate to note that in processing recent steel mill PSD permit applications many conflicting pressures are often brought to bear, many of which are not recognized factors in the BACT determination process.

- In most cases, financing of the project has been committed and debt service obligations active thus great pressure exists to complete the permitting process and proceed with construction.

- Financing pressures are augmented by pressure from agency and intervenor representatives to accept otherwise objectional permit provisions in exchange for timely permit processing and issuance. While Birmingham Steel was not an active participant in the referenced BACT determinations in Alabama, it is well aware of these type activities which resulted in objectional grain loadings being accepted as a price for having the project move onward. These activities are not recognized by the BACT Regulatory Guidelines as legitimate parts of the BACT process, yet in real life they play an important part. Once in place, the resulting BACT limits are represented to be fully legitimate and in accordance with applicable guidelines. Having this endorsement, the limits suddenly become the baseline or starting point for the next series of application, for which the applicants are asked to consider equal or yet lower limits. As a case in point, one recently completed "mini-mill" (not PSD) has a permit limit of 0.0018 gr/dscf under the guise of going "one up" on all the other installations.

- In like fashion to the scenario described above, the environmental virtue of these progressively less emission limits is not a legitimate BACT consideration; but in real life perhaps it should be. There is very little environmental gain in reducing the emission limit from 0.0052 to 0.0032 gr/dscf; certainly not as much virtue as installing paved roads and maintaining a good and responsible sweeping program.

  Birmingham Steel Corporation continues to support the position that the proposed grain loading limit of 0.0052 gr/dscf represents an economically sustainable BACT level. The real life expectations are that when new, an emission level on the order of one-half this value will be achieved. As the equipment ages and subsequent tests made, it is expected that the realized grain load will slowly increase to a more or less steady level between 0.004 and 0.005 gr/dscf.

Page 2, Item 2 - Sulfur Dioxide Emission Limit

The EPA commentor has suggested that the application should present carbon and sulfur contents of scrap steel and other feed materials. At best, ranges of content for these materials could be furnished but not fixed values. In doing so these data would indeed be interesting but somewhat superfluous in that no relationship has been established between these sulfur contents and sulfur dioxide emissions. The EPA emission factor document AIRS lists a factor of 0.7 lb SO_2/ton steel, obtained from unknown sources. Test data on SO_2 emissions from EAF operations is scarce but for those data available to Birmingham

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345
March 16, 1999

IN REPLY REFER TO:

RECEIVED
MAR 22 1999
BUREAU OF
AIR REGULATION

Mr. C. H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road, MS 48
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Our Air Quality Branch has reviewed the Prevention of Significant Deterioration Application for AmeriSteel Corporation's proposed modernization of its Jacksonville Mill. The facility is located 36 km southeast of Okefenokee Wilderness and 136 km south of Wolf Island Wilderness, both Class I air quality areas administered by the U.S. Fish and Wildlife Service. The technical review comments from our Air Quality Branch are enclosed. In summary, AmeriSteel's best available control technology analysis is not adequately documented. Based on the information in the application, we recommend that AmeriSteel be required to meet lower emission limits for particulate matter than those proposed. For control of nitrogen oxides (NO_X) emissions, we recommend that selective catalytic reduction be required.

Thank you for giving us the opportunity to comment on this permit application. We appreciate your cooperation in notifying us of proposed projects with the potential to impact the air quality and related resources of our Class I air quality areas. If you have questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at (303) 969-2617.

Sincerely,

A Dale Hall

for Sam D. Hamilton
Regional Director

Enclosure

CC: J. Reynolds, BAR
Duval Co
EPA
NED
M. Lueck, Amersteel

Technical Review of
Prevention of Significant Deterioration Permit Application
For AmeriSteel Scrap Recycling Facility
Baldwin, Florida
by
Air Quality Branch, Fish and Wildlife Service - Denver
March 8, 1999

AmeriSteel Corporation (AmeriSteel) is proposing to modernize its scrap steel recycling facility at its Jacksonville Mill Division in Baldwin, Florida. The facility is located 36 km southeast of Okefenokee Wilderness and 136 km south of Wolf Island Wilderness, both Class I air quality areas administered by the U.S. Fish and Wildlife Service. The proposed project will result in PSD-significant increases in emissions of nitrogen oxides (NO_X), fine particulate matter less than 10 microns in diameter (PM-10), lead (Pb), and carbon monoxide (CO). Emissions (in tons per year - TPY) are summarized below.

POLLUTANT	EMISSIONS INCREASE (TPY)
NO_X	131
PM-10	69
CO	1,090
Pb	1.89

Best Available Control Technology (BACT) Analysis

Electric Arc and Ladle Furnaces: AmeriSteel proposes to limit particulate emissions from the primary electric arc furnace (EAF) to 0.0052 grains per dry standard cubic foot (gr/dscf) by the use of direct shell evacuation, canopy hood, and a baghouse. We agree that the proposed technology represents BACT. However, we believe the proposed limit is too high. For comparison, Chaparral Steel in Virginia recently received a permit limiting its EAF to 0.0018 gr/dscf. Table 1 lists additional facilities with limits lower than that proposed by AmeriSteel. In addition, AmeriSteel states in its application that its past actual emissions have been 0.0018 gr/dscf. Despite this information, AmeriSteel has dismissed the lower 0.0018 gr/dscf limit on the basis that costs are prohibitive. Because AmeriSteel has not provided information to describe the assumptions upon which its cost calculations were based, it is impossible to evaluate them. For example, has AmeriSteel considered expansion of the existing baghouse capacity? As a condition to a PSD permit issued by the State of Virginia to Roanoke Electric Steel (RES) in 1994, RES increased the capacity of its baghouse to prevent particulate emissions from increasing above the 0.0032 gr/dscf previous limit when it, too, increased production.

BACT would dictate that the Ladle Furnace also meet a 0.0018 gr/dscf particulate limit.

Billet Reheat Furnace: AmeriSteel has proposed to double its NO_x emission rate to 0.20

lb/mmBtu. AmeriSteel dismissed selective catalytic reduction (SCR) on the basis that the cost is economically prohibitive. However, AmeriSteel did not consider its proposed emission rate increase in its economic analysis of SCR. The absence of documentation to support the cost calculations makes evaluation very difficult. However, our own cost estimates (enclosed), indicate that application of SCR could reduce NO_x emissions for a cost below $3,000 per ton.

Because SCR is very likely to prove economically feasible for this application, documentation from the vendor should be included for verification of the Purchased Equipment Cost. Control efficiency and calculations should be supplied to support the engineering estimates given.

Although AmeriSteel currently uses low-NOx Burners for the reheat furnace, it has proposed to double allowable emissions to 0.20-lb NOx/mmBtu. However, three other steel mills included in Table 1 have proposed much lower limits (0.10-0.14-lb NOx/mmBtu) using low- NOx technology.

Conclusions & Recommendations

In the absence of adequate documentation by AmeriSteel to the contrary, we conclude that:

Both the electric arc furnace and ladle metallurgy furnace should meet a particulate limit of 0.0018 gr/dscf.

SCR is technically and economically feasible for 85% control of NO_x emissions from the reheat furnace. SCR should be required for this application.

Low-NO_x Burners are capable of lowering NO_x emissions to 0.10 lb/mmBtu.

Air Quality Related Values (AQRV) Analysis

Because of the types and amounts of emissions, there is low potential for effects to AQRVs at the Class I areas from the proposed project. We have advised the Florida Department of Environmental Protection that the applicant does not need to conduct visibility analyses for this proposed project.

Contact: Ellen Porter, Air Quality Branch (303) 969-2617.

Table 1. Steel Mill BACT

Source	Emission Unit	Capacity		Pollutant Limit PM	SO2	NOx	VOC	
Ameristeel (proposed)	EAF	100	TPH	**0.0052**				gr/dscf
	LMS	combined			0.24	0.33		lb/T
	BRF	185	mmBtu/hr	0.011	0.0006	0.20		lb/mmBtu
	Total			0.27	0.23	0.52	0.26	lb/T
Chaparral (permit)	EAF	215	TPH	**0.0018**				gr/dscf
				0.08	0.70	0.70	0.35	lb/T
	BRF	276	mmBtu/hr	0.010	0.0007	0.21	0.005	lb/mmBtu
	Total			**0.13**	0.70	0.99	**0.36**	lb/T
North Star Steel								
(proposed)	EAF	100	TPH	**0.0018**				gr/dscf
	LMS	combined		**0.17**	0.24	1.62	**0.01**	lb/T
	BRF	75	mmBtu/hr	0.007	**0.0006**	**0.10**	**0.001**	lb/mmBtu
	Total			0.26	**0.24**	4.09	0.42	lb/T
Nucor (NC) (proposed)	EAF	250	TPH	0.0035				gr/dscf
	LMS	combined		0.21	0.35	0.51	0.35	lb/T
	BRF	300	mmBtu/hr	0.008	**0.0006**	0.14	0.007	lb/mmBtu
	Total			0.25	0.35	0.84	**0.36**	lb/T
Nucor (SC) (proposed)	EAF	165	TPH	0.0035				gr/dscf
					0.20	0.35	0.13	lb/T
	BRF					0.17		lb/mmBtu
Republic (proposed)	EAF	108		0.0032				gr/dscf
	LMS	combined		0.17	0.35	0.20	0.35	lb/T
	BRF	186		**0.005**	**0.0006**	0.11	0.002	lb/mmBtu
	Total	108		0.27	**0.28**	**0.58**	**0.36**	lb/T
RES (permit)	EAF	90	TPH	0.0034				gr/dscf
				0.11	**0.19**	0.42	0.33	lb/T
	LMS			0.03	0.07	0.07	0.002	lb/T
	BRF	190	mmBtu/hr	0.035	**0.0006**	0.21	0.008	lb/mmBtu
	Total							lb/T

Ameristeel Re-Heat Furnace with SCR

Plant Data

Site	Class I Area(s)	Furnace	Capacity (mmBtu/hr)
Duval County	OKEF	Reheat	185

	(lb/hr)	(TPY)	(lb/mmBtu)
Proposed permit NOx limits	37	157.25	0.2

Given/Assumptions

Furnace	Reheat
Gas Flow (acfm)	43,620
Basic Equipment Costs	$490,000
Ammonia storage	$30,000
Uncontrolled Emission rate (TPY)	157.25
Control efficiency (%)	85%
Operating Hours per Year	8500
Operating Hours per Shift	8
Operating Shifts per Year	1063
Operating Labor Cost ($/hr)	27
Maintenance Labor Cost ($/hr)	30
Electrical Cost ($/kWh)	0.033
SCR pressure drop (in. H2O)	3.0
Reagent Costs ($/T)	$250
Reagent Use (lb/hr)	50
Catalyst replacement	$165,000
Catalyst volume (m3)	5
Catalyst disposal ($/m3)	$500
Catalyst Life (Yr)	5
Equipment Life (Yr)	10
Interest Rate (%)	7.00%

Ameristeel Re-Heat Furnace with SCR

Capital Costs (OAQPS Control Cost Manual Chapter 3--Catalytic Incinerators)

Cost Item		Factor	Cost
Direct Costs			Reheat
Purchased equipment costs			
SCR + auxiliary equipment, EC		A	$490,000
Ammonia storage			$30,000
Instrumentation		0.10 A	$49,000
Sales taxes		0.06 A	$29,400
Freight		0.05 A	$24,500
Purchased equipment cost, PEC	B=	1.18 A	$622,900
Direct installation costs			
Foundations & supports		0.08 B	$49,832
Handling & erection		0.14 B	$87,206
Electrical		0.04 B	$24,916
Piping		0.02 B	$12,458
Insulation		0.01 B	$6,229
Painting		0.01 B	$6,229
Direct installation costs		0.30 B	$186,870
Site preparation	As required, SP		$0
Buildings	As required, Bldg.		$0
Total Direct Costs, DC		1.30 B+SP+Bldg	$809,770
Indirect Costs (installation)			
Engineering		0.10 B	$62,290
Construction and field expenses		0.05 B	$31,145
Contractor fees		0.10 B	$62,290
Start-up		0.02 B	$12,458
Performance test		0.01 B	$6,229
Contingencies		0.03 B	$18,687
Total Indirect Cost, IC		0.31 B	$193,099
Total Capital Investment = DC + IC		1.61 B+SP+Bldg	$1,002,869

Ameristeel Re-Heat Furnace with SCR

Annual Costs (OAQPS Control Cost Manual Chapter 3--Catalytic Incinerators)

Cost Item	Factor	Cost
Direct Annual Costs, DC		Reheat
Operating labor		
Operator	0.5 hr/shift	$14,344
Supervisor	15% of operator	$2,152
Operating materials		
reagent		$53,125
Maintenance		
Labor	0.5 hr/shift	$15,938
Material	100% of maintenance labor	$15,938
Catalyst replacement		$33,000
Catalyst replacement labor @ 15% of replacement cost		$4,950
Catalyst disposal		$500
Electricity		
fan	0.000181* 43620 acfm* 3 in. H2O*	
	8,500 hr/yr * 0.033 $/kWh =	$6,644
Total DC		$146,589
Indirect Annual Costs, IC		
Overhead	60% of maintenance costs	$31,992
Administrative charges	2% of Total Capital Investment	$20,057
Insurance	1% of Total Capital Investment	$10,029
Property tax	1% of Total Capital Investment	$10,029
Capital recovery	0.1424 * [Total Capital Investment-1.08(Cat Cost)]	$137,712
Total Annual Cost Total IC		$209,819
	DC + IC	$356,408

Ameristeel Re-Heat Furnace with SCR

Cost Effectiveness

Source	Reheat	Units
Pollutant	NOx	
Uncontrolled emissions	157.3	TPY
Control efficiency	85%	
Controlled emissions	23.6	TPY
Pollutants removed	133.7	TPY
Annual cost	$356,408	/yr
Annual cost - Emission fees saved	$352,398	@ $30/T
Cost/ton	$2,666	/T

AIRregs

Air Pollution Regulatory Services, Inc.

Serving minimills since 1979

3025 Windward Plaza, Suite 300, Alpharetta GA 30005

Phone 770 753-3123 E-mail bgeddis@avana.net FAX 770 753-3151

Bob Geddis, Air Permit Specialist

March 16, 1999

A. A. Linero, P.E., Administrator
New Source Review Section
Florida Department of Environmental Protection
Division of Air Resources Management
Twin Towers Office Building, 2600 Blair Stone Road
Tallahassee FL 32399-2400

Re: Your February 26, 1999 letter to AmeriSteel concerning modeling issues.
DEP File No. 0310157-004-AC (PSD FL 261 - Proposed Jacksonville Mill Modernization.

Dear Mr. Linero:

We appreciate your comments on our PSD application concerning the need for a lead ambient air analysis and the single modeled exceedance of the PM10 significant ambient impact level. We have performed the requested lead analysis using the original emissions distribution and it shows no significant ambient impact. We have enclosed this analysis. As explained in detail below, we think the single exceedance of the significance level can be resolved because the receptor with the high reading is located on a private, guarded, railroad switchyard, immediately adjacent to AmeriSteel. This receptor area is inaccessible to the public. If this "no public access" solution does not resolve the issue to your satisfaction, we propose to apply the average grainloading that we used in Table 1-1 of our PSD application, 0.0018 gr/dscf, uniformly to the baghouses. This simple change does not revise the net annual or hourly emissions increases but will result in impacts less than the significant impact levels at all receptors.

Modeling issue

A conservative screening model shows that AmeriSteel narrowly exceeded the PSD significant impact level of 5 μgm/m^3 for PM10 on one of the 1827, 24-hour periods, where the predicted impact was 5.46μgm/m^3. In other words, AmeriSteel is below the significant impact level 99.95 percent of the 1827 days modeled, and the single exceedance is less than one-half (0.46) of one microgram. This impact occurs at a single azimuth and distance - just beyond the west plant boundary at 290 degrees and 150 meters from the receptor network origin. We feel that this event derives from a peculiar combination of meteorology and the downwash equations contained in the ISCST3 model. Consider the following:

a) The single date involved is 3/9/86.
b) On this date the impact magnitude was 5.46μgm/m^3, as previously stated; baghouse 3-4 contributed 4.93μgm/m^3 but the nearby baghouse 1-2 contributed 0.0000 μgm/m^3, in spite of having comparable emissions.
c) The second highest impact at this receptor for the remainder of 1986 was 2.71 μgm/m^3. This is roughly 50% of the first highest. Normally we would expect the second highest to

be a higher percentage, suggesting that the 5.46 μgm/m^3 is some kind of anomaly.

Despite the downwash theory, we are not certain why this modeled exceedance is so much higher than the other 1826, 24-hour impacts. If we rounded the 5.46 to one significant figure, we would get "5" which is an acceptable impact. EPA's significant impact level is one significant figure and it may be appropriate to resolve this by rounding.

No public access

The Clean Act defines ambient air as "that portion of the atmosphere, external to buildings, to which the general public has access." This definition applies to the railroad switchyard where the exceedance was predicted. Refer to the attached grid that shows that the kidney-shaped maximum impact area is contained within the CSX railroad switchyard on the west side of the shop bordering Route 301. The railroad yard joins AmeriSteel; so there is no space between the tracks and AmeriSteel. There is no exceedance of any standard or significance level for any pollutant predicted for any area that the public has access to.

Net emissions increases

In Table 1 of our PSD application, we used a past actual grainloading of 0.0018 gr/scf for baghouse 3-4, which is well below our allowable of 0.0052. Thus the net "paper" change is 0.0052 minus 0.0018 or 0.0034 gr/scf. At the flow rates given, this converts to a net emission rate increase of 15.6 lbs/hour which is the rate (converted to grams/second) we used in the screen model. The 0.0018 gr/dscf derives from the most recent two years of compliance tests. Our review of the compliance tests since 1990 shows that these grainloadings have ranged from 0.0003 to 0.0152 gr/dscf. The 0.0018 gr/dscf rate attained during the most recent two years reflects the effort expended by the company to operate and maintain these units in the best possible manner. So they have now created a problem under the PSD "present actual vs. future potential" policy. An environmental virtue (good operation) has become a PSD permitting liability. We understand EPA's proposed NSR "PAL" reforms (61 FR 38250) could remedy this.

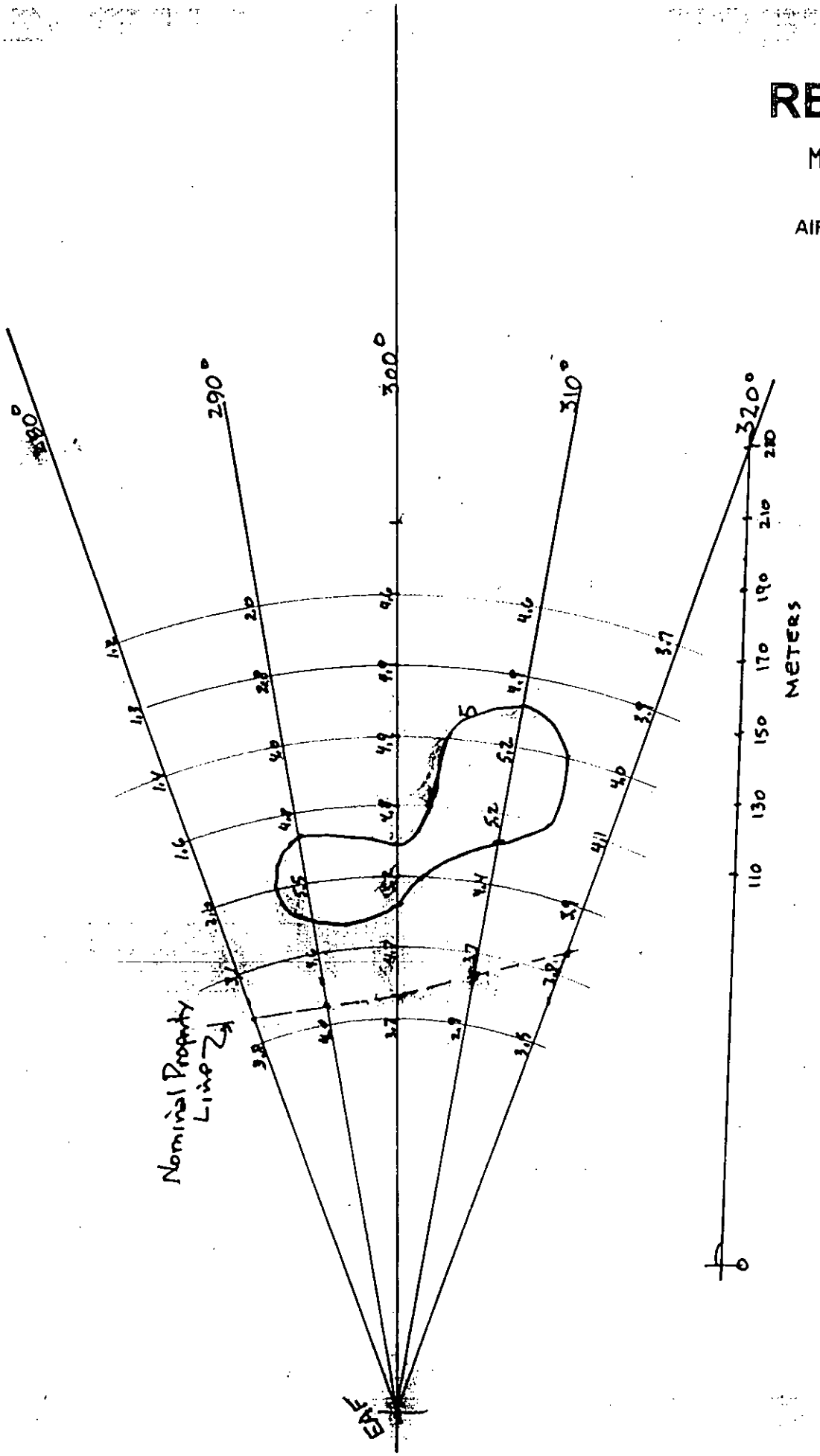
We have attached the results of modeling of the more representative net emissions increase for the same five year period. The model shows compliance with all significance levels. Please call me or Dr. Bob Sholtes (904/964-8440) if you have questions. We appreciate your consideration.

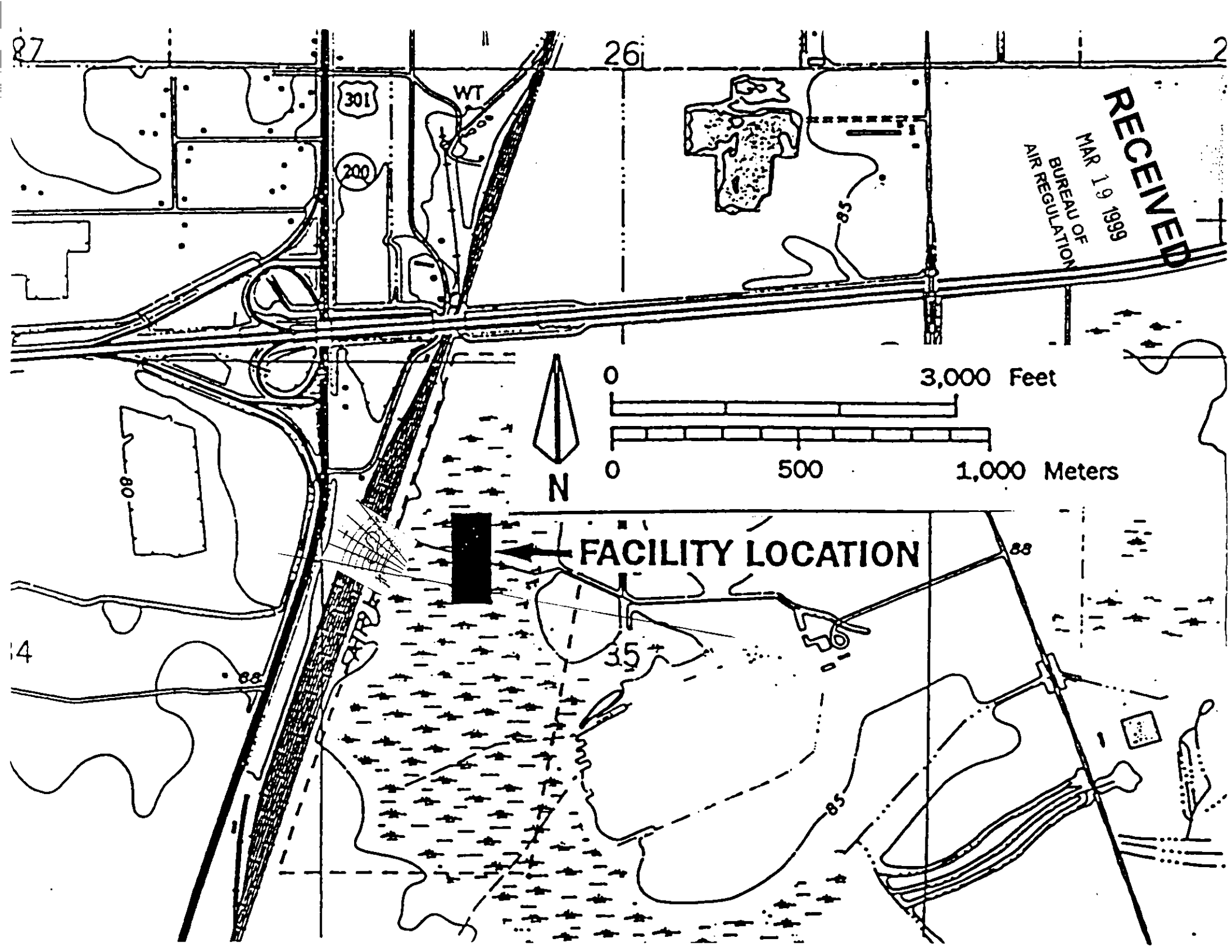
Sincerely,

AIRregs, Inc.	Ambient Air Services, Inc.	AmeriSteel Jacksonville Mill Div.
Robert R. Geddis	Robert S. Sholtes, Ph.D., P.E.	Michael A. Leuck
Air Permit Specialist		Environmental Specialist

cc: Donnie Shumake, John Reynolds

Enclosures: Revised PM10 and lead modeling and area drawings

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FACILITY LOCATION
35
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85
88

TABLE B-3

AmeriSteel - Baldwin Mill

Significant Impact Analysis
Project Emission Increments

PLANT SITE			
Pollutant	**Model Max. Impact**	**PSD Significant Impact**	**DeMinimus/ Monitoring**
CO (8 hour)	80.6	500	575
CO (1 hour)	160.1	2000	--
SO_2 (3 hour)	3.97	25	13
SO_2 (24 hour)	2.10	5	--
NO_x (Annual)	.238/.362*	1	14
PM (24 hour)	4.37	5	10
PM (Annual)	0.39	1	--
CLASSS I AREAS			
Pollutant	**Model Max. Input**		**PSD Significant Impact**
	Wolf Island	**Okefenokee**	
PM10 (Annual)	.0016	.0076	0.20
PM10 (24 hour)	.044	.20	0.30
SO_2 (24 hour)	.022	.091	0.20
SO_2 (3 hour)	.076	.319	1.00
NO_2 (Annual)	.0027	.006	0.10

* Model used NO emissions, AAQS standards are as NO_2; the higher number is maximum impact as NO_2.

Revised 3-15-99

TABLE B-4
Summary of Five Year Analysis
Project Impacts in $\mu g/m^3$

	Property Boundary	Direction, degrees	Wolf Island	Okefenokee (Max)
AMERPM4	0.38	280	.0014	.0068
AMERPM5	0.39	280	.0014	.0056
AMERPM6	0.33	320	.0016	.0066
AMERPM7	0.34	280	.00098	.0059
AMERPM8	0.39	280	.0011	.0076
AMERPM44	4.37	220	0.044	0.14
AMERPM45	3.22	280	0.031	0.14
AMERPM46	3.68	220	0.035	0.156
AMERPM47	3.84	220	0.021	0.090
AMERPM48	3.33	220	0.023	0.196
AMERCO14	154.0	220	6.00	17.2
AMERCO15	160.1	290	6.00	15.3
AMERCO16	154.8	220	6.62	15.2
AMERCO17	157.8	220	3.71	13.8
AMERCO18	140.1	220	4.06	16.9
AMERCO84	75.0	220	1.28	4.16
AMERCO85	80.6	220	0.89	3.94
AMERCO86	75.1	220	1.17	4.17
AMERCO87	77.4	220	0.66	2.82
AMERCO88	62.0	220	0.72	4.77
AMERNO4	.160	220	.0022	.0110
AMERNO5	.180	220	.0023	.0089
AMERNO6	.143	220	.0027	.0110
AMERNO7	.238	220	.0017	.0096
AMERNO8	.146	220	.0019	.0120
AMERSO34	3.78	220	.069	0.290
AMERSO35	3.97	220	.071	0.300
AMERSO36	3.21	220	.076	0.319
AMERSO37	3.54	220	.043	0.183
AMERSO38	3.71	220	.047	0.277
AMERSO44	2.10	220	.022	.066
AMERSO45	1.79	220	.015	.064
AMERSO46	1.77	220	.016	.072
AMERSO47	1.87	220	.011	.044
AMERSO48	1.49	220	.012	.091

Note: NO_x impacts in $\mu g/m^3$ of NO.

Revised 3-15-99

ATTACHMENT A
to
PSD Air Permit Application
AmeriSteel Corporation
January, 1999

AIR QUALITY ANALYSES FOR LEAD

Table 1-6 of the January, 1999 application identifies lead as an air pollutant exceeding the PSD emissions increase threshold of 0.6 tons/year and thus subject to scrutiny under PSD rules. This scrutiny has been carried out by performing a five year ambient air quality analysis. Both project emissions increases and future potential emissions have been modeled. The former are to be compared with an unconfirmed (by the applicant) significant impact magnitude of 0.03 $\mu g/m^3$ quarterly and a de minimus impact magnitude of 0.1 $\mu g/m^3$ quarterly. The latter magnitudes are for comparison to the AAQS of 1.5 $\mu g/m^3$ quarterly. The analyses were performed with the ISCST3 model and using a PM lead fraction of 2.9 percent in consort with Table 1-6. The following tables present these results, and indicate comfortable compliance with each.

AMERISTEEL LEAD AMBIENT IMPACTS PROJECT EMISSIONS INCREMENT				
	QUARTER			
	1	2	3	4
1984	0.00163	0.0151	0.0130	0.0126
1985	0.0075	0.0110	0.0157	0.0115
1986	0.0094	0.0130	0.0103	0.0109
1987	0.0127	0.0135	0.0118	0.0145
1988	0.0098	0.0138	0.0171	0.0104
$\mu g/m^3$ Quarterly Average				

AMERISTEEL LEAD AMBIENT AIR QUALITY POTENTIAL EMISSIONS				
	QUARTER			
	1	2	3	4
1984	0.0184	0.0393	0.0341	0.0263
1985	0.0187	0.0293	0.0424	0.0300
1986	0.0234	0.0333	0.0272	0.0218
1987	0.0237	0.0357	0.0311	0.0275
1988	0.0234	0.0349	0.0453	0.0199
$\mu g/m^3$ Quarterly Average				

3-15-99

Lead Emissions for AAQS

Future Potential

536,279 SCFMD x 60 x $\frac{.0052 \text{ gr/dscf}}{7000 \text{ lb/dscf}}$ x 0.029

= 0.693 lb Pb/hr. total

or 0.3466 lb Pb/hr in each BH stack

0.0437 gm/sec.

EAF Fugitive

5.0 ton/yr. x $\frac{2000 \text{ lb/ton}}{8000 \text{ hr/yr.}}$ = 1.25 lb PM/hr.

= 0.0363 lb. Pb/hr.

= 0.00458 gm/sec.

AMBIENT AIR SERVICES, INC.

106 Ambient Air Way • Starke, FL 32091 • (904)964-8440 • Fax (904)964-6675

FAX TRANSMITTAL COVER SHEET

TO: Cleve Holladay
FDER

RE: AmeriSteel

FAX NO: 850 922 6979

FROM: R. Sholtes

DATE:

NO. OF PAGES BEING FAXED 3 (Including this page)

NOTES:

PLEASE CONTACT _____ AT (904) 964-8440 IF YOU HAVE ANY QUESTIONS CONCERNING THIS FAX TRANSMISSION.

Original Baghouse Emission Calculations

Based on recent test data.

BH 1-2

3/97	0.0024 gr/dscf	245542 SCFMD @ 178F	
3/98	0.0020 " "	253 872 SCFMD @ 178F	
Avg.	0.0022 " "	249707	@ 178

$lb/hr = 0.0022\ gr/dscf \times 249{,}707\ dscfm \times 60\ min/hr \times \frac{1\ lb}{7000\ gr}$

$= 4.709\ lb/hr$

Potential $lb/hr = 4.709 \times \frac{.0052}{.0022} = 11.1297$

Apparent Increase $= 11.130 - 4.709 = 6.421$

$= 0.8097 = \underline{0.81\ gm/sec.}$

BH 3-4

3/97	0.0008 gr/dscf	~~308,485~~ 276943 dscfm	
3/98	0.0014 gr/dscf	296,201 dscfm	
Avg.	0.0011 gr/dscf	286,572 "	

$lb/hr = 0.0011\ gr/dscf \times 286{,}572\ dscfm \times 60\ min/hr \times \frac{1\ lb}{7000\ gr}$

$= 2.702\ lb/hr.$

Potential $lb/hr = 2.702 \times \frac{.0052}{.0011} = 12.773\ lb/hr.$

Apparent Increase $= 12.773 - 2.702 = 10.071\ lb/hr.$

$= \underline{1.270\ gm/sec}$

Revised Baghouse Emission Approach

Ref. Pg 2 of 3/16/99 letter to A. A. Linero

From Table I

- past actual grain loading = 0.0018 gr/dscf Average of all baghouses
- past actual flow = 536,279 dscfm.

Potential increase = 0.0052 - 0.0018 gr/dscf = 0.0034 gr/dscf

" " = 0.0034 gr/dscf × 536,279 dscfm × 60 min/hr × $\frac{1}{7000}$ $\frac{lb}{gr}$

= 15.65 lb/hr

= 1,971 gm/sec

or = 0.985 gm/sec for each baghouse.

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 26, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Donnie Shumake, Vice President and General Manager
AmeriSteel Corporation
7973 Rebar Road
Baldwin, Florida 32234

Re: Request for Additional Information
DEP File No. 0310157-004-AC (PSD-FL-261)
Proposed Jacksonville Mill Division Modernization

Dear Mr. Lueck:

On January 29, 1999 the Department received your application and complete fee for an air construction permit for the modernization of the Jacksonville Mill Division scrap steel recycling facility southeast of Baldwin, in Duval County. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. A review of the air dispersion modeling information contained on the computer diskettes submitted with the application shows a greater than significant impact (5.46 ug/m^3, receptor location of 290°, 150 meters) for the PM_{10} 24-hour averaging time at an offsite receptor. A predicted significant impact at an off-site receptor due to the project's PM_{10} emissions subjects the project to a full impact ambient air quality standards (AAQS) and PSD Class II increment analysis for the PM_{10} 24-hour averaging time. Please provide that analysis to the Department.

2. Lead (Pb) was a PSD significant pollutant for this project; however, no Pb ambient air quality analysis was provided for this pollutant. Please provide this analysis.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call Cleve Holladay (meteorologist) at 850/921-8986.

Sincerely,

2/26

A. A. Linero, P.E. Administrator
New Source Review Section

AAL/ch

cc: Mr. Jim Manning, RESD
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS
Mr. Chris Kirts, NED
Mr. Michael Lueck, AmeriSteel
Mr. Robert Sholtes, Ambient Air Services

P 265 659 427

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Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 2/26/99	

PS Form **3800**, April 1995

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- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

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1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Donnie Shumake
Vice President & General Manager
Ameri Steel Corporation
7973 Rebar Road
Baldwin, Florida 32234

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4a. Article Number
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7. Date of Delivery

5. Received By: *(Print Name)*
VERN NOBLE

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Vern Noble

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Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 8, 1999

Mr. Gregg Worley, Section Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA - Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Ameristeel Corporation
0310157-004-AC, PSD-FL-261

Dear Mr. Worley:

Enclosed for your review and comment is an application for the above mentioned project. Your comments can be forwarded to my attention at the letterhead address or faxed to the Bureau at (850)922-6979.

If you have any questions, please contact John Reynolds at (850)921-9536.

Sincerely,

Kyri Tobers for

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

enclosures

cc: J. Reynolds, BAR

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 8, 1999

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Section
NPS-Air Quality Division
Post Office Box 25287
Denver, Colorado 80225

Re: Ameristeel Corporation
0310157-004-AC, PSD-FL-261

Dear Mr. Bunyak:

Enclosed for your review and comment is an application for the above mentioned project. Your comments can be forwarded to my attention at the letterhead address or faxed to the Bureau at (850)922-6979.

If you have any questions, please contact John Reynolds at (850)921-9536.

Sincerely,

Kuni Dober for

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

enclosures

cc: J. Reynolds, BAR