

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

United States Steel Corporation)
Low NOx Burners)
) PCB 14-
) (Tax Certification - Air)
)
PROPERTY IDENTIFICATION/PARCEL)
NUMBER 22-2-19-24-16-401-011)

NOTICE

TO: [Electronic filing] [Service by mail]
John Therriault, Clerk Richard Veitch
Illinois Pollution Control Board U.S. Steel Corporation
State of Illinois Center 1951 State Street
100 W. Randolph Street, Suite 11-500 Granite City, Illinois 62040
Chicago, Illinois 60601

[Service by mail]
Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
P.O. Box 19033
Springfield, Illinois 62794

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Pollution Control Board the **APPEARANCE** and **RECOMMENDATION** of the Illinois Environmental Protection Agency, a paper copy of which is herewith served upon the applicant and a representative of the Illinois Department of Revenue.

Respectfully submitted by,

/s/ Robb H. Layman
Robb H. Layman
Assistant Counsel

Date: December 12, 2013

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
Telephone: (217) 524-9137

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS**

United States Steel Corporation)
Low NOx Burners)
)
) PCB 14-
) (Tax Certification - Air)
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PROPERTY IDENTIFICATION/PARCEL)
NUMBER 22-2-19-24-16-401-011)

RECOMMENDATION

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (“Illinois EPA”), through its attorneys, and pursuant to 35 Ill. Adm. Code 125.204 of the ILLINOIS POLLUTION CONTROL BOARD’S (“Board”) procedural regulations, files the Illinois EPA’s Recommendation in the above-referenced request for tax certification of pollution control facilities. The Illinois EPA recommends **issuance** of a tax certification covering the subject matter of the request. In support thereof, the Illinois EPA states as follows:

1. On or about December 18, 2009, the Illinois EPA received an application and supporting information from United States Steel Corporation (“US Steel”) concerning the proposed tax certification of certain air emission sources and/or equipment located at its Granite City manufacturing facility in Madison County, Illinois. A copy of the application is attached hereto. **[Exhibit A]**. A revised application was received by the Illinois EPA on October 15, 2010, reflecting changes to certain cost information. **[Exhibit B]**.

2. The applicant’s principal business and facility address is as follows:

US Steel Corporation
1951 State Street
Granite City, Illinois 62040

3. The subject matter of this request consists of Low Nitrogen Oxides (“NOx”) Burners, which will reduce and control NOx emissions from the hot strip mill slab reheat furnaces at the manufacturing facility. As described in the application, the project involves the

installation of low NOx burner technology that is typically designed to burn fuel gas at a lower flame temperature, thereby reducing the formation of NOx emissions. *See*, Exhibit A, page 1 at Section D. The burners are being fitted on the affected furnaces, designated Furnace Nos. 1 through 4, and are “custom designed to interface with the existing combustion air connections and shell mounting flanges.” *Id.* The project also included the construction of an associated shut-off valve and electrical panel for Furnace No. 4. The installation of the new Low NOx Burners for the aforementioned furnaces will reduce NOx emissions from manufacturing operations that would otherwise be emitted to the atmosphere.

4. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2002), defines “pollution control facilities” as:

“any system, method, construction, device or appliance appurtenant thereto, or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution... or (b) treating, pretreating, modifying or disposing of any potential solid, liquid, gaseous pollutant which if released without treatment, pretreatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property.”

5. Pollution control facilities are entitled to preferential tax treatment, as provided by 35 ILCS 200/11-5 (2002).

6. Based on information in the application materials and the primary purpose of the Low NOx Burners to prevent or reduce air pollution, it is the Illinois EPA’s engineering judgment that the systems and/or devices may be considered as “pollution control facilities” in accordance with the statutory definition and consistent with the Board’s regulations at 35 Ill. Adm. Code 125.200. [Exhibit C]. In keeping with prior recommendations in similar matters, the Illinois EPA would expect any preferential tax treatment for the Low NOx Burners, as determined by the Department of Revenue in separate proceedings, to address only the incremental costs associated with the devices in relation to conventional burner devices.

7. Because the information in the application demonstrates that the Low NOx Burners satisfy the aforementioned statutory and regulatory criteria, the Illinois EPA recommends that the Board **issue** the applicant's requested tax certification.

Respectfully submitted by,

/s/ Robb H. Layman

Robb H. Layman
Assistant Counsel

DATED: December 12, 2013

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: (217) 524-9137

CERTIFICATE OF SERVICE

I hereby certify that on the 12th day of December, 2013, I electronically filed the following instruments entitled **NOTICE, APPEARANCE** and **RECOMMENDATION** with:

John Therriault, Clerk
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601

and, further, that I did send a true and correct paper copy of the same foregoing instruments, by First Class Mail with postage thereon fully paid and deposited into the possession of the United States Postal Service, to:

Steve Santarelli
Illinois Department of Revenue
101 West Jefferson
P.O. Box 19033
Springfield, Illinois 62794

Richard Veitch
US Steel Corporation
1951 State Street
Granite City, Illinois 62040

/s/ Robb H. Layman
Robb H. Layman
Assistant Counsel

**APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
POLLUTION CONTROL FACILITY**
AIR WATER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
P. O. Box 19276, Springfield, IL 62794-9276



This Agency is authorized to request this information under Illinois Revised Statutes, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

FOR AGENCY USE

| File No. | Date Received | Certification No. | Date | |
|---|---|--|--|--|
| Sec. A APPLICANT | Company Name United States Steel Corporation | | | |
| | Person Authorized to Receive Certification Richard Veitch | | Person to Contact for Additional Details Jill Foust | |
| | Street Address 1951 State Street | | Street Address 1951 State Street | |
| | Municipality, State & Zip Code Granite City, Illinois 62040 | | Municipality, State & Zip Code Granite City, Illinois 62040 | |
| | Telephone Number (618) 451-3456 | | Telephone Number (618) 451-3391 | |
| | Location of Facility Quarter Section | Township 3N | Range 10W | Municipality Granite City |
| | Street Address 1951 State Street | | County Madison | Township 3N |
| | Property Identification Number 22-2-19-24-16-401-011 | | Book Number 5 | Parcel Number 22-2-19-24-16-401-011 |
| | Sec. B MANUFACTURING OPERATIONS | Nature of Operations Conducted at the Above Location Coke, Iron and Steel Making Operations | | |
| | | Water Pollution Control Construction Permit No. | | Date Issued |
| NPDES PERMIT No. | | Date Issued | Expiration Date | |
| Air Pollution Control Construction Permit No. 06070022 | | Date Issued 01/16/08 | | |
| Air Pollution Control Operating Permit No. | | Date Issued | | |
| Sec. C MANUFACTURING PROCESS | Describe Unit Process Steel slabs are reheated in one of the four Hot Strip Mill Reheat furnaces prior to processing in the the hot strip mill to raise the slab's temperature to a level that can form easily. | | | |
| | Materials Used in Process The reheat furnaces burn combinations of coke oven gas and natural gas. | | | |
| Sec. D POLLUTION CONTROL FACILITY DESCRIPTION | Describe Pollution Abatement Control Facility Installation of Low NOx burners to reduce NOx emissions by approximately 380 tons per year, see IEPA permit #6070022 attached. The burners will be custom designed to interface with the existing combustion air connections and shell mounting flanges. The IEPA construction permit for the low NOx burners is #06070022 issued on January 18, 2007. | | | |

RECEIVED
STATE OF ILLINOIS
DEC 18 2009
Environmental Protection Agency
BUREAU OF AIR

Exhibit A

| | | | | |
|-----------------|---|--|--|---|
| Sec. E | (1) Nature of Contaminants or Pollutants | | | |
| | CONTAMINANTS | Material Retained, Captured or Recovered | | |
| | | Contaminant or Pollutant | DESCRIPTION | DISPOSAL OR USE |
| | | NOx | Gas | None |
| | | | | |
| | | | | |
| | | | | |
| | | (2) Point(s) of Waste Water Discharge | | |
| | | Plans and Specifications Attached | | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| | | (3) Are contaminants (or residues) collected by the control facility? | | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| | (4) Date installation completed <u>10/06/09</u> status of installation on date of application _____ | | | |
| ACCOUNTING DATA | (5) a. FAIR CASH VALUE IF CONSIDERED REAL PROPERTY: | | \$ 1,860,000.00 | |
| | b. NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY: | | \$ 0.00 | |
| | c. PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY: | | \$ 0.00 | |
| | d. PRODUCTIVE NET ANNUAL INCOME OF CONTROL FACILITY: | | \$ -384,000.00 | |
| | e. PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE: | | % 1.1% | |
| | (5) e. PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE: | | % 1.1% | |
| Sec. F | The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code. | | | |
| | SIGNATURE |   | | |
| | Signature | Title | | |
| Sec. G | INSTRUCTIONS FOR COMPILING AND FILING APPLICATION | | | |
| | General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet. | | | |
| | Sec. A | Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required. | | |
| | Sec. B | Self-explanatory. Submit copies of all permits issued by local pollution control agencies. (e.g. MSD Construction Permit) | | |
| | Sec. C | Refers to manufacturing processes or materials on which pollution control facility is used. | | |
| | Sec. D | Narrative description of the pollution control facility, indicating that its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility. State permit number, date, and agency issuing permit. A narrative description and a process flow diagram describing the <u>pollution control facility</u> . Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an <u>average</u> analysis of the influent and effluent of the control facility stating the collection efficiency. | | |
| | Sec. E | List air contaminants, or water pollution substances released as effluents to the manufacturing processes. List also the final disposal of any contaminants removed from the manufacturing processes. Item (1) – Refers to pollutants and contaminants removed from the process by the pollution control facility. Item (2) – Refers to water pollution but can apply to water-carried wastes from air pollution control facilities. Submit drawings, which clearly show (a) Point(s) of discharge to receiving stream, and (b) Sewers and process piping to and from the control facility. Item (3) – If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value in dollars reclaimed by sale or reuse of the collected substances. State the cost of reclamation and related expense. Item (4) – State the date which the pollution control facility was first placed in service and operated. If not, explain. Item (5) – This information is essential to the certification and assessment actions. This accounting data must be completed to activate project review prior to certification by this Agency. | | |
| | Sec. F | Self-explanatory. Signature must be a corporate authorized signature. | | |
| | | Submit to: Illinois EPA P.O. Box 19276 Springfield, IL 62794-9276 | Attention: Al Keller Permit Section Division of Water Pollution Control | Attention: Donald E. Sutton Permit Section Division of Air Pollution Control |

Attachments

- A. IEPA Construction Permit #06070022
- C. Process flow diagram of hot strip mill
- D. Listing of each Major Piece of Equipment

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

United States Steel Corporation
Attn: Larry Siebenberger
600 Grant Street
Pittsburgh, PA 15219

Application No.: 06070022

I.D. No.: 119813AAI

Applicant's Designation:

Date Received: July 11, 2006

Subject: Emission Reduction Projects

Date Issued: January 18, 2007

Location: 1951 State Street, Granite City

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a coke oven gas desulfurization system for the existing coke oven by-products plant and low NO_x burners in the hot strip slab furnaces, which would generate creditable emission reductions that would facilitate construction of other projects at the source, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a.
 - i. This permit authorizes construction of a coke oven gas (COG) desulfurization system ("affected system"), which consists of a packed tower amine unit, hydrogen cyanide destruct unit, and a Claus sulfur recovery unit with oxidizer. The affected system is designed to remove hydrogen sulfide (H₂S) from the COG stream after processing in the by-products plant, prior to use as fuel.
 - ii. This permit is issued based upon the construction of the affected system being an emission control project that will reduce emissions of particulate matter (PM), particles with size equal to or smaller than 10 microns (PM₁₀), sulfur dioxide (SO₂), and sulfuric acid mist currently accompanying use of coke oven gas in combustion units at the source.

Note: The application indicates an annual decrease of 71 tons of PM/PM₁₀, 2,546 tons of SO₂, and 56 tons of sulfuric acid mist, from this system.
 - iii. This permit does not alter requirements of existing permits for the plant, including Permit Number 94120017, which addresses SO₂ emissions from certain fuel burning emission units at the plant.
- b.
 - i. This permit authorizes installation of low NO_x burners on hot strip slab furnaces 1 through 4 (the affected furnaces).

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Note: The application indicates an annual decrease of 381.77 tons of NO_x from the installation of low NO_x burners in the affected furnaces.

- c. This permit also acknowledges the planned permanent shutdown of Boilers 1-10, which would accompany construction of a new co-generation facility. Once the boilers are permanently shutdown, the restart of any of these boilers would require a construction permit from the Illinois EPA.

Note: The application indicates an annual decrease of 9.2 tons of CO, 186.7 tons of NO_x, 0.8 tons of PM/PM₁₀, 0.1 tons of SO₂, and 0.6 tons of VOM from the shutdown of Boilers 1-10. These values represent the actual emissions attributable to natural gas combustion in Boilers 1-10 and a portion of the NO_x emissions attributable to a portion of the COG burned in the boilers.

The affected furnaces will combust additional COG and less natural gas due to the shutdown of Boilers 1-10. This transfer of COG will result in an overall decrease in emissions because affected boilers have higher NO_x emissions burners whereas the affected furnaces have low NO_x burners.

- d. This permit does not authorize the construction of new emission units at the source. In particular, this permit does not authorize construction of a co-generation facility or a heat recovery coke manufacturing facility, for which separate applications have been submitted and are currently pending with the Illinois EPA. (I.D. 119813AAI, Application No. 06070023, and ID 119040ATN, Application No. 06050052).

- 2a. i. The source shall operate the affected system at all times the by-products plant is producing COG, except when undertaking maintenance or repairs of the system. This total "outage" period shall not exceed 35 days (840 hours) per calendar year.

ii. A. COG production during periods of time when the affected system is not operating shall not exceed 1,092 mmscf/year.

B. Total COG production from the existing coke oven battery shall not exceed 1,140 mmscf/month and 11,400 mmscf/year.

Note: This limit is based on the design capacity of the affected system as indicated in the application, i.e., 31.2 mmscf/day, monthly average.

iii. A. The affected system shall be operated and maintained in conformance with good air pollution control practices.

B. The oxidizer combustion chamber for the sulfur recovery unit shall be operated at a temperature that is consistent with at least the manufacturer's recommended temperature.

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- b. i. The affected furnaces shall be equipped, operated, and maintained with low NO_x burners. The burners shall be operated and maintained in conformance with good air pollution control practices.
- ii. Operation of the affected furnaces shall not exceed the following limits:

| Emission Unit | Total Gas Usage (mmBtu/year) | COG Usage (mmBtu/year) |
|---------------------------|---------------------------------|---------------------------|
| Hot Strip Slab Furnace #3 | 1,654,304 | 1,187,790 |
| Hot Strip Slab Furnace #4 | 2,206,238 | 1,544,367 |
| Total (Furnaces 1-4) | 7,169,150 | 2,421,388 |

- c. Conditions 2(a)(i) and (ii), 2(b), and 3 of this permit take effect upon initial startup of new facility(ies) whose permitting, as reflected in Construction Permit(s) for those new unit(s), relies upon the emission reductions provided by the projects addressed by this permit.

Note: This permit does not specify particular levels of sulfur removal by the affected system before the above date(s) when operated on a voluntary basis. This is because the reduction in sulfur from the COG achieved by the system will exceed the equivalent SO₂ emissions from the sulfur recovery unit. This reduction in sulfur will also be accompanied by a reduction in particulate emissions when COG is burned.

- 3a. i. The H₂S content of the raw COG entering the desulfurization system shall not exceed 500 grains of H₂S/100 scf of COG.
- ii. The H₂S content of COG shall not exceed 66 grains/100 scf of COG, annual average
- iii. During periods of time when the affected system is operating, the H₂S content of COG shall not exceed the following limits: 25 grains of H₂S/100 scf of COG, monthly average, excluding outages, startup, shutdown, and upsets such as failure of fans, pumps or heat exchangers and aberrations in the composition or condition of the raw COG.
- b. i. Annual emissions of the source from combustion of COG shall not exceed the following limits:

| | Limits (Tons/Year) | |
|-------------------------------------|--------------------|-----------------|
| | PM ₁₀ | SO ₂ |
| "Outage" of Affected System | 47.55 | 530.59 |
| Total (includes normal and outage): | 224.80 | 807.90 |

- ii. Emissions from the sulfur recovery unit shall not exceed the following limits:

| PM ₁₀ | | SO ₂ | |
|------------------|-----------|-----------------|-----------|
| (Lbs/Hr) | (Tons/Yr) | (Lbs/Hr) | (Tons/Yr) |
| 5.6 | 24.6 | 67.3 | 294.7 |

- iii. Combined emissions of PM₁₀ and SO₂ from the sulfur recovery unit and combustion of coke oven gas shall not exceed 246.8 and 1,074.1 tons/year for PM₁₀ and SO₂, respectively.
 - iv. The SO₂ emission limits in this permit are based on the H₂S content of the coke oven gas. These limits do not include emissions attributable to sulfur compounds other than H₂S.
- c. i. A. Emissions of NO_x from the affected furnaces shall not exceed the following limits:

| Furnace | Limit (Lbs/mmBtu) |
|------------|----------------------|
| Furnace #1 | 0.150 |
| Furnace #2 | 0.150 |
| Furnace #3 | 0.264 |
| Furnace #4 | 0.283 |

- B. Emissions of NO_x from the affected furnaces (combined) shall not exceed 73 tons/month and 724.09 tons/year.
- ii. This permit is issued based upon installation of low NO_x burners for the affected furnaces without any increase in emissions of CO, VOM, SO₂ and PM/PM₁₀.
- d. Compliance with the annual limits shall be determined from a running total of 12 months of data, unless otherwise specified.
- 4a. i. Within one year of initial startup of the affected system, the PM₁₀, NO_x, CO, and SO₂ emissions of the sulfur recovery unit shall be measured during conditions which are representative of maximum emissions.
- ii. Within 180 days of initial startup of the low NO_x burners, the NO_x and CO emissions of each affected furnace shall be measured during conditions which are representative of maximum emissions.
- b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A, for USEPA test methods.

| | |
|---------------------------|----------------|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |

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| | |
|------------------|----------------------------|
| PM ₁₀ | USEPA Method 201A* and 202 |
| Sulfur Dioxide | USEPA Method 6 |
| Nitrogen Oxides | USEPA Method 7 |
| Carbon Monoxide | USEPA Method 10 |

* The Permittee may also use Method 5, instead of Method 201A, provided that the measured results are considered PM₁₀.

- c. At least 60 days prior to the actual date of emissions testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions, any constraints on the operating configuration of the unit during testing, and the means by which the operating parameters for the emission unit and any control equipment will be determined.
 - iii. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
 - iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.
 - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
 - vi. The format and content of the Source Test Report.
- d. The Illinois EPA shall be notified prior to this emissions test to enable the Illinois EPA to observe the test. Notification of the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- e. Copies of the Final Report(s) for this emissions test shall be submitted to the Illinois EPA within 45 days after completion of the test program. The Final Report shall include as a minimum:
 - i. A summary of results
 - ii. General information

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- iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule
 - iv. Detailed description of test conditions, including
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. raw material consumption
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- 5a. The Permittee shall install, operate, and maintain a continuous monitoring system for the H₂S content of COG after processing by the affected system. (See also Condition 7 of FESOP 94120017)
- b. The Permittee shall equip the thermal oxidizer for the sulfur recovery unit with a continuous monitoring system which is installed, calibrated, maintained, and operated according to vendor specifications at all times that the affected system is in operation, to monitor the combustion chamber temperature.
- c. The Permittee shall keep the following records for each required monitoring system.
- i. Recorded data.
 - ii. A log of operating time for the control system or devices, monitoring system, and the coke oven byproducts plant.
 - iii. A maintenance log for the oxidizer and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.
6. The Permittee shall conduct sampling and analysis for the H₂S content and total sulfur content of raw and treated COG (grains/100 scf).
7. The Permittee shall maintain records of the following items:
- a. Operating Records for the Packed Tower Amine Unit
 - i. Amine temperature leaving the unit (°F).
 - ii. Amine flow (gallons/minute).
 - iii. COG flow into or out of the unit.

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- b. Logs for the Affected System and Affected Furnaces
 - i. Operating logs.
 - ii. Maintenance logs detailing all routine and non-routine maintenance performed including dates and duration of any outages.
 - c. Production Records
 - i. COG production during periods of time when the affected system is operating (mmscf/month and mmscf/year).
 - ii. COG production during periods of time when the affected system is not operating (mmscf/month and mmscf/year).
 - iii. COG usage (mmBtu/month and mmBtu/year) for the affected furnaces #1-2 (combined), #3, and #4.
 - iv. Natural gas usage (mmBtu/month and mmBtu/year) for the affected furnaces #1-2 (combined), #3, and #4.
 - d. Records of H₂S content of COG:
 - i. H₂S content of raw COG.
 - ii. H₂S content of COG, annual average.
 - iii. H₂S content of treated COG, excluding outages, startup, shutdown, and upsets, monthly average.
 - e. Emission Records
 - i. Emissions of PM₁₀ and SO₂ from COG combustion based on the above records and separately recorded for total emissions and emissions during outage of the affected system.
 - ii. Emissions of PM₁₀ and SO₂ from the sulfur recovery unit (tons/month and tons/year).
 - iii. Emissions of NO_x from the affected furnaces (tons/month and tons/year).
8. One copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

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and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

and one copy of reports and notifications concerning emission testing or continuous monitoring systems shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit
9511 West Harrison
Des Plaines, Illinois 60016

9. The affected system and affected furnaces with low NO_x burners may be operated under this permit until final action is taken on the source's CAAPP application.

If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager of Permit Section
Division of Air Pollution Control

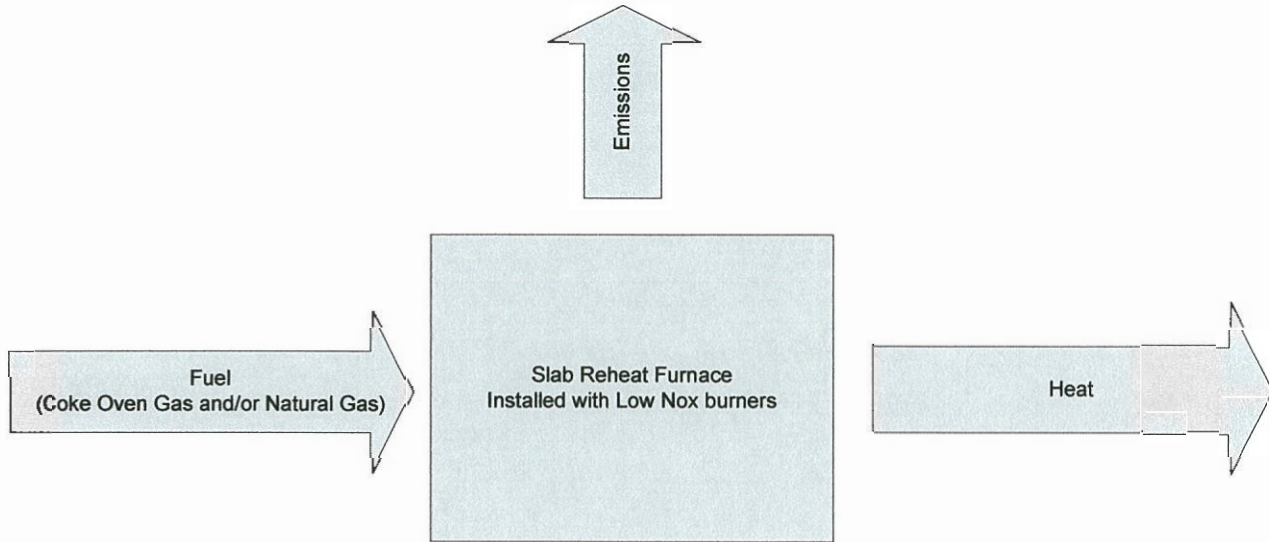
ECB:JMS:psj

cc: Region 3
CES

Attachment C.

Low NOx burners

Hot Strip Mill Slab Reheat Furnaces



Attachment D.
Major Piece of Equipment List

Major Equipment Low NOx Burners HSM Reheat Furnaces

| Quantity | Description |
|-----------------|---|
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 6 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 2 | Ultra Low NOx Burner |
| | 18" shut-off valve for flame safety on Furnace #4 |
| | Flame safety electrical panel for Furnace #4 |

**BOSE
McKINNEY
& EVANS LLP**

ATTORNEYS AT LAW

David A. Suess

Direct Dial: (317) 684-5112

Fax: (317) 223-0112

E-Mail: DSuess@boselaw.com

October 11, 2010

VIA CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Illinois EPA
Permit Section
Division of Air Pollution
P.O. Box 19276
Springfield, IL 62794-9276
Attention: Donald E. Sutton

RECEIVED

OCT 15 2010

Illinois Environmental Protection Agency
BUREAU OF AIR
STATE OF ILLINOIS

**Re: Amended Applications for Certification (Property Tax Treatment) of
Pollution Control Facility – Air**

Dear Mr. Sutton:

On behalf of United States Steel Corporation, I am enclosing two (2) amended Applications for Certification (Property Tax Treatment) Pollution Control Facility (Air), located at 1951 State Street, Madison County, Illinois, on two parcels: Parcel No. 22-1-20-20-00-000-005.001 and 22-2-19-24-16-401-011. The prior applications for the same pollution control facilities were filed on December 16, 2009, and reflected incorrect information in Section E (5)(a) (the Fair Cash Value if Considered Real Property).

Specifically, the original Application for Certification of Pollution Control Facility on parcel no. 22-1-20-20-00-000-005.001 incorrectly identified the Fair Cash Value if Considered Real Property at \$15,870,000. This figure was reported based on the mistaken belief that only 50% of the costs should have been reported. The actual Fair Cash Value if Considered Real Property of this Pollution Control Facility is \$31,740,000, and this is the amount reported in Section E(5)(a) of the amended Application enclosed. All other information on the amended Application is the same as reported on the original application.

Similarly, the original Application for Certification of Pollution Control Facility on parcel no. 22-2-19-24-16-401-011 incorrectly identified the Fair Cash Value if Considered Real Property at \$1,860,000. This figure was reported based on the mistaken belief that only 50% of the costs should have been reported. The actual Fair Cash Value if Considered Real Property of this Pollution Control Facility is \$3,720,000, and this is the amount reported in Section E(5)(a) of the amended Application enclosed. All other information on the amended Application is the same as reported on the original application.

Exhibit B

**BOSE
McKINNEY
& EVANS LLP**

ATTORNEYS AT LAW

Donald E. Sutton
October 11, 2010
Page Two

For your records and use, we have enclosed an original of each Amended Application. We have also enclosed a copy of each Amended Application, which we request that you file-stamp and return in the self-addressed envelope enclosed.

If you have any questions or concerns, please contact me at (317) 496-3481 or Thomas Atherton at (317) 684-5348.

Very truly yours,



David A. Suess

DAS:

cc: Michael J. Prendergast
Thomas M. Atherton

CERT MAIL# 7008 1830 0001 1423 291 b

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
 POLLUTION CONTROL FACILITY
 AIR WATER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 P. O. Box 19276, Springfield, IL 62794-9276

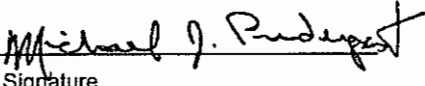
This Agency is authorized to request this information under Illinois Revised Statutes, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

| FOR AGENCY USE | | | | | |
|---|---|--|--|------------------------------|----------------|
| File No. | Date Received | Certification No. | Date | | |
| Sec. A APPLICANT | Company Name United States Steel Corporation | | | | |
| | Person Authorized to Receive Certification Richard Veitch | | Person to Contact for Additional Details Jill Foust | | |
| | Street Address 1951 State Street | | Street Address 1951 State Street | | |
| | Municipality, State & Zip Code Granite City, Illinois 62040 | | Municipality, State & Zip Code Granite City, Illinois 62040 | | |
| | Telephone Number (618) 451-3456 | | Telephone Number (618) 451-3391 | | |
| | Location of Facility Quarter Section | Township 3N | Range 10W | Municipality Granite City | Township 3N |
| | Street Address 1951 State Street | | County Madison | Book Number 5 | |
| | Property Identification Number 22-2-19-24-16-401-011 | | Parcel Number 22-2-19-24-16-401-011 | | |
| | Sec. B MANUFACTURING OPERATIONS | Nature of Operations Conducted at the Above Location Coke, Iron and Steel Making Operations | | | |
| | | Water Pollution Control Construction Permit No. | | Date Issued | |
| NPDES PERMIT No. | | Date Issued | Expiration Date | | |
| Air Pollution Control Construction Permit No. 06070022 | | Date Issued 01/16/08 | | | |
| Air Pollution Control Operating Permit No. | | Date Issued | | | |
| Sec. C MANUFACTURING PROCESS | Describe Unit Process Steel slabs are reheated in one of the four Hot Strip Mill Reheat furnaces prior to processing in the the hot strip mill to raise the slab's temperature to a level that can form easily. | | | | |
| | Materials Used in Process The reheat furnaces burn combinations of coke oven gas and natural gas. | | | | |
| Sec. D POLLUTION CONTROL FACILITY DESCRIPTION | Describe Pollution Abatement Control Facility Installation of Low NOx burners to reduce NOx emissions by approximately 380 tons per year, see IEPA permit #6070022 attached. The burners will be custom designed to interface with the existing combustion air connections and shell mounting flanges. The IEPA construction permit for the low NOX burners is #08070022 issued on January 18, 2007. | | | | |

RECEIVED

OCT 15 2010

Illinois Environmental Protection Agency
 BUREAU OF AIR
 STATE OF ILLINOIS

| | | | |
|---|---|--|---|
| Sec. E | (1) Nature of Contaminants or Pollutants | | |
| POLLUTION CONTROL FACILITY - CONTAMINANTS | | | Material Retained, Captured or Recovered |
| | Contaminant or Pollutant | DESCRIPTION | DISPOSAL OR USE |
| | NOx | Gas | None |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| (2) Point(s) of Waste Water Discharge | | | |
| | | Plans and Specifications Attached | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| (3) | Are contaminants (or residues) collected by the control facility? | | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| (4) | Date installation completed <u>10/06/09</u> status of installation on date of application _____ | | |
| (5) | a. FAIR CASH VALUE IF CONSIDERED REAL PROPERTY: | \$ 3,720,000.00 | |
| | b. NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY: | \$ 0.00 | |
| | c. PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY: | \$ 0.00 | |
| | d. PRODUCTIVE NET ANNUAL INCOME OF CONTROL FACILITY: | \$ -384,000.00 | |
| | e. PERCENTAGE CONTROL FACILITY BEARS TO WHOLE FACILITY VALUE: | % 1.1% | |
| Sec. F | The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code. | | |
| SIGNATURE |  <div style="display: inline-block; margin-left: 100px;"> <u>Assistant Secretary</u> Title </div> | | |
| Sec. G | INSTRUCTIONS FOR COMPILING AND FILING APPLICATION | | |
| General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet. | | | |
| INSTRUCTIONS | Sec. A | Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required. | |
| | Sec. B | Self-explanatory. Submit copies of all permits issued by local pollution control agencies. (e.g. MSD Construction Permit) | |
| | Sec. C | Refers to manufacturing processes or materials on which pollution control facility is used. | |
| | Sec. D | Narrative description of the pollution control facility, indicating that its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility. State permit number, date, and agency issuing permit. A narrative description and a process flow diagram describing the <u>pollution control facility</u> . Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an <u>average</u> analysis of the influent and effluent of the control facility stating the collection efficiency. | |
| | Sec. E | List air contaminants, or water pollution substances released as effluents to the manufacturing processes. List also the final disposal of any contaminants removed from the manufacturing processes. Item (1) - Refers to pollutants and contaminants removed from the process by the pollution control facility. Item (2) - Refers to water pollution but can apply to water-carried wastes from air pollution control facilities. Submit drawings, which clearly show (a) Point(s) of discharge to receiving stream, and (b) Sewers and process piping to and from the control facility. Item (3) - If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value in dollars reclaimed by sale or reuse of the collected substances. State the cost of reclamation and related expense. Item (4) - State the date which the pollution control facility was first placed in service and operated. If not, explain. Item (5) - This information is essential to the certification and assessment actions. This accounting data must be completed to activate project review prior to certification by this Agency. | |
| | Sec. F | Self-explanatory. Signature must be a corporate authorized signature. | |
| | Submit to: | Attention: | Attention: |
| | Illinois EPA P.O. Box 19276 Springfield, IL 62794-9276 | Al Keller Permit Section Division of Water Pollution Control | Donald E. Sutton Permit Section Division of Air Pollution Control |

Attachments

- A. IEPA Construction Permit #06070022
- C. Process flow diagram of hot strip mill
- D. Listing of each Major Piece of Equipment

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

United States Steel Corporation
Attn: Larry Siebenberger
600 Grant Street
Pittsburgh, PA 15219

Application No.: 06070022

I.D. No.: 119813AAI

Applicant's Designation:

Date Received: July 11, 2006

Subject: Emission Reduction Projects

Date Issued: January 18, 2007

Location: 1951 State Street, Granite City

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a coke oven gas desulfurization system for the existing coke oven by-products plant and low NO_x burners in the hot strip slab furnaces, which would generate creditable emission reductions that would facilitate construction of other projects at the source, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. i. This permit authorizes construction of a coke oven gas (COG) desulfurization system ("affected system"), which consists of a packed tower amine unit, hydrogen cyanide destruct unit, and a Claus sulfur recovery unit with oxidizer. The affected system is designed to remove hydrogen sulfide (H₂S) from the COG stream after processing in the by-products plant, prior to use as fuel.
- ii. This permit is issued based upon the construction of the affected system being an emission control project that will reduce emissions of particulate matter (PM), particles with size equal to or smaller than 10 microns (PM₁₀), sulfur dioxide (SO₂), and sulfuric acid mist currently accompanying use of coke oven gas in combustion units at the source.

Note: The application indicates an annual decrease of 71 tons of PM/PM₁₀, 2,546 tons of SO₂, and 56 tons of sulfuric acid mist, from this system.

- iii. This permit does not alter requirements of existing permits for the plant, including Permit Number 94120017, which addresses SO₂ emissions from certain fuel burning emission units at the plant.
- b. i. This permit authorizes installation of low NO_x burners on hot strip slab furnaces 1 through 4 (the affected furnaces).

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Note: The application indicates an annual decrease of 381.77 tons of NO_x from the installation of low NO_x burners in the affected furnaces.

- c. This permit also acknowledges the planned permanent shutdown of Boilers 1-10, which would accompany construction of a new co-generation facility. Once the boilers are permanently shutdown, the restart of any of these boilers would require a construction permit from the Illinois EPA.

Note: The application indicates an annual decrease of 9.2 tons of CO, 186.7 tons of NO_x, 0.8 tons of PM/PM₁₀, 0.1 tons of SO₂, and 0.6 tons of VOM from the shutdown of Boilers 1-10. These values represent the actual emissions attributable to natural gas combustion in Boilers 1-10 and a portion of the NO_x emissions attributable to a portion of the COG burned in the boilers.

The affected furnaces will combust additional COG and less natural gas due to the shutdown of Boilers 1-10. This transfer of COG will result in an overall decrease in emissions because affected boilers have higher NO_x emissions burners whereas the affected furnaces have low NO_x burners.

- d. This permit does not authorize the construction of new emission units at the source. In particular, this permit does not authorize construction of a co-generation facility or a heat recovery coke manufacturing facility, for which separate applications have been submitted and are currently pending with the Illinois EPA. (I.D. 119813AAI, Application No. 06070023, and ID 119040ATN, Application No. 06050052).
- 2a. i. The source shall operate the affected system at all times the by-products plant is producing COG, except when undertaking maintenance or repairs of the system. This total "outage" period shall not exceed 35 days (840 hours) per calendar year.
- ii. A. COG production during periods of time when the affected system is not operating shall not exceed 1,092 mmscf/year.
- B. Total COG production from the existing coke oven battery shall not exceed 1,140 mmscf/month and 11,400 mmscf/year.
- Note: This limit is based on the design capacity of the affected system as indicated in the application, i.e., 31.2 mmscf/day, monthly average.
- iii. A. The affected system shall be operated and maintained in conformance with good air pollution control practices.
- B. The oxidizer combustion chamber for the sulfur recovery unit shall be operated at a temperature that is consistent with at least the manufacturer's recommended temperature.

Page 3

- b. 1. The affected furnaces shall be equipped, operated, and maintained with low NO_x burners. The burners shall be operated and maintained in conformance with good air pollution control practices.
- ii. Operation of the affected furnaces shall not exceed the following limits:

| Emission Unit | Total Gas Usage (mmBtu/year) | COG Usage (mmBtu/year) |
|---------------------------|---------------------------------|---------------------------|
| Hot Strip Slab Furnace #3 | 1,654,304 | 1,187,790 |
| Hot Strip Slab Furnace #4 | 2,206,238 | 1,544,367 |
| Total (Furnaces 1-4) | 7,169,150 | 2,421,388 |

- c. Conditions 2(a)(i) and (ii), 2(b), and 3 of this permit take effect upon initial startup of new facility(ies) whose permitting, as reflected in Construction Permit(s) for those new unit(s), relies upon the emission reductions provided by the projects addressed by this permit.

Note: This permit does not specify particular levels of sulfur removal by the affected system before the above date(s) when operated on a voluntary basis. This is because the reduction in sulfur from the COG achieved by the system will exceed the equivalent SO₂ emissions from the sulfur recovery unit. This reduction in sulfur will also be accompanied by a reduction in particulate emissions when COG is burned.

- 3a. 1. The H₂S content of the raw COG entering the desulfurization system shall not exceed 500 grains of H₂S/100 scf of COG.
- ii. The H₂S content of COG shall not exceed 66 grains/100 scf of COG, annual average
- iii. During periods of time when the affected system is operating, the H₂S content of COG shall not exceed the following limits: 25 grains of H₂S/100 scf of COG, monthly average, excluding outages, startup, shutdown, and upsets such as failure of fans, pumps or heat exchangers and aberrations in the composition or condition of the raw COG.
- b. 1. Annual emissions of the source from combustion of COG shall not exceed the following limits:

| | Limits (Tons/Year) | |
|-------------------------------------|--------------------|-----------------|
| | PM ₁₀ | SO ₂ |
| "Outage" of Affected System | 47.55 | 530.59 |
| Total (includes normal and outage): | 224.80 | 807.90 |

- ii. Emissions from the sulfur recovery unit shall not exceed the following limits:

| PM ₁₀ | | SO ₂ | |
|------------------|-----------|-----------------|-----------|
| (Lbs/Hr) | (Tons/Yr) | (Lbs/Hr) | (Tons/Yr) |
| 5.6 | 24.6 | 67.3 | 294.7 |

- iii. Combined emissions of PM₁₀ and SO₂ from the sulfur recovery unit and combustion of coke oven gas shall not exceed 246.8 and 1,074.1 tons/year for PM₁₀ and SO₂, respectively.
- iv. The SO₂ emission limits in this permit are based on the R₂S content of the coke oven gas. These limits do not include emissions attributable to sulfur compounds other than H₂S.

- c. i. A. Emissions of NO_x from the affected furnaces shall not exceed the following limits:

| Furnace | Limit (Lbs/mmBtu) |
|------------|----------------------|
| Furnace #1 | 0.150 |
| Furnace #2 | 0.150 |
| Furnace #3 | 0.264 |
| Furnace #4 | 0.283 |

- B. Emissions of NO_x from the affected furnaces (combined) shall not exceed 73 tons/month and 724.09 tons/year.

- ii. This permit is issued based upon installation of low NO_x burners for the affected furnaces without any increase in emissions of CO, VOM, SO₂ and PM/PM₁₀.

- d. Compliance with the annual limits shall be determined from a running total of 12 months of data, unless otherwise specified.

- 4a. i. Within one year of initial startup of the affected system, the PM₁₀, NO_x, CO, and SO₂ emissions of the sulfur recovery unit shall be measured during conditions which are representative of maximum emissions.

- ii. Within 180 days of initial startup of the low NO_x burners, the NO_x and CO emissions of each affected furnace shall be measured during conditions which are representative of maximum emissions.

- b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A, for USEPA test methods.

| | |
|---------------------------|----------------|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |

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| | |
|------------------|----------------------------|
| PM ₁₀ | USEPA Method 201A* and 202 |
| Sulfur Dioxide | USEPA Method 6 |
| Nitrogen Oxides | USEPA Method 7 |
| Carbon Monoxide | USEPA Method 10 |

* The Permittee may also use Method 5, instead of Method 201A, provided that the measured results are considered PM₁₀.

- c. At least 60 days prior to the actual date of emissions testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
- i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions, any constraints on the operating configuration of the unit during testing, and the means by which the operating parameters for the emission unit and any control equipment will be determined.
 - iii. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
 - iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.
 - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
 - vi. The format and content of the Source Test Report.
- d. The Illinois EPA shall be notified prior to this emissions test to enable the Illinois EPA to observe the test. Notification of the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- e. Copies of the Final Report(s) for this emissions test shall be submitted to the Illinois EPA within 45 days after completion of the test program. The Final Report shall include as a minimum:
- i. A summary of results
 - ii. General information

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- iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule
 - iv. Detailed description of test conditions, including
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. raw material consumption
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- 5a. The Permittee shall install, operate, and maintain a continuous monitoring system for the H₂S content of COG after processing by the affected system. (See also Condition 7 of FESOP 94120017)
- b. The Permittee shall equip the thermal oxidizer for the sulfur recovery unit with a continuous monitoring system which is installed, calibrated, maintained, and operated according to vendor specifications at all times that the affected system is in operation, to monitor the combustion chamber temperature.
- c. The Permittee shall keep the following records for each required monitoring system.
- i. Recorded data.
 - ii. A log of operating time for the control system or devices, monitoring system, and the coke oven byproducts plant.
 - iii. A maintenance log for the oxidizer and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.
6. The Permittee shall conduct sampling and analysis for the H₂S content and total sulfur content of raw and treated COG (grains/100 scf).
7. The Permittee shall maintain records of the following items:
- a. Operating Records for the Packed Tower Amine Unit
 - i. Amine temperature leaving the unit (°F).
 - ii. Amine flow (gallons/minute).
 - iii. COG flow into or out of the unit.

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- b. Logs for the Affected System and Affected Furnaces
 - i. Operating logs.
 - ii. Maintenance logs detailing all routine and non-routine maintenance performed including dates and duration of any outages.
 - c. Production Records
 - i. COG production during periods of time when the affected system is operating (mmscf/month and mmscf/year).
 - ii. COG production during periods of time when the affected system is not operating (mmscf/month and mmscf/year).
 - iii. COG usage (mmBtu/month and mmBtu/year) for the affected furnaces #1-2 (combined), #3, and #4.
 - iv. Natural gas usage (mmBtu/month and mmBtu/year) for the affected furnaces #1-2 (combined), #3, and #4.
 - d. Records of H₂S content of COG:
 - i. H₂S content of raw COG.
 - ii. H₂S content of COG, annual average.
 - iii. H₂S content of treated COG, excluding outages, startup, shutdown, and upsets, monthly average.
 - e. Emission Records
 - i. Emissions of PM₁₀ and SO₂ from COG combustion based on the above records and separately recorded for total emissions and emissions during outage of the affected system.
 - ii. Emissions of PM₁₀ and SO₂ from the sulfur recovery unit (tons/month and tons/year).
 - iii. Emissions of NO_x from the affected furnaces (tons/month and tons/year).
8. One copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

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and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

and one copy of reports and notifications concerning emission testing or continuous monitoring systems shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit
9511 West Harrison
Des Plaines, Illinois 60016

9. The affected system and affected furnaces with low NO_x burners may be operated under this permit until final action is taken on the source's CAAPP application.

If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager of Permit Section
Division of Air Pollution Control

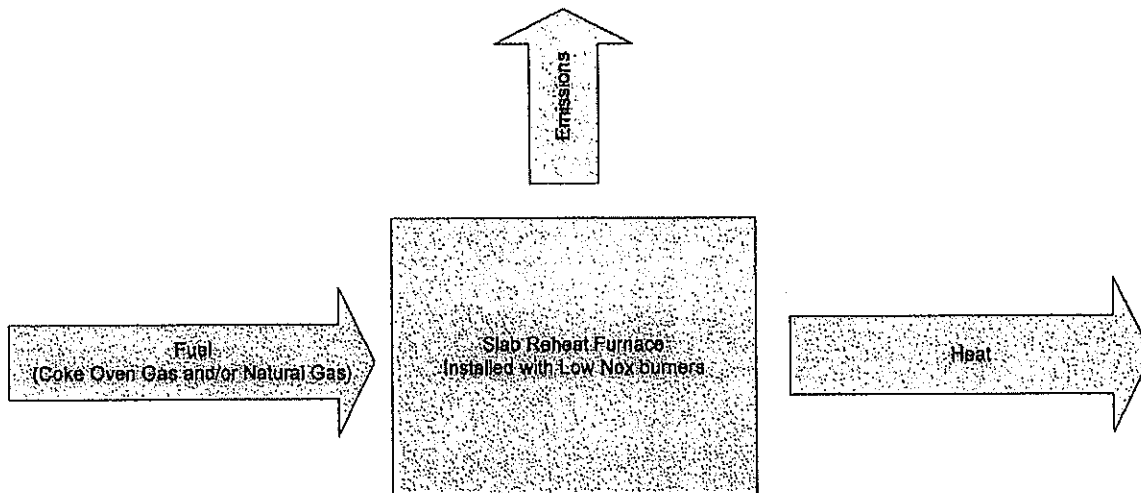
ECB:JMS:psj

cc: Region 3
CES

Attachment C.

Low NOx burners

Hot Strip Mill Slab Reheat Furnaces



Attachment D.
Major Piece of Equipment List

Major Equipment Low NOx Burners HSM Reheat Furnaces

| Quantity | Description |
|-----------------|---|
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 8 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 6 | Ultra Low NOx Burner |
| 4 | Ultra Low NOx Burner |
| 2 | Ultra Low NOx Burner |
| | 18" shut-off valve for flame safety on Furnace #4 |
| | Flame safety electrical panel for Furnace #4 |

Technical Recommendation for Tax Certification Approval

Date: December 21, 2010

To: Robb Layman

From: Edwin C. Bakowski *12/21/10*

Subject: United States Steel Corporation TC-09-12-18B

This Agency received a request on December 18, 2009 from United States Steel Corporation for an Illinois EPA recommendation regarding tax certification of air pollution control facilities pursuant to 35 Ill. Adm. Code 125.204. I offer the following recommendation.

The air pollution control facilities in this request include the following:

Low Nox Burners that interface with the existing combustion air connections and shell mounting flanges which reduces Nox emissions . Because the primary purpose of this equipment is to reduce or eliminate air pollution, it is certified as a pollution control facility.

This facility is located at 1951 State Street, Granite City, Madison County
The property identification number is 22-2-19-24-16-401-011

Based on the information included in this submittal, it is my engineering Judgement that the proposed facility may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing air pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. Therefore, it is my recommendation that the Board issue the requested tax Certification for this facility.

Exhibit C