

217/782-2113

CONSTRUCTION PERMIT -- PSD APPROVAL

PERMITTEE

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

Application No.: 06070088

I.D. No.: 119813AAI

Applicant's Designation:

Date Received: July 11, 2006

Subject: Coke Conveyance System

Date Issued: March 13, 2008

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 conveyance system, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the above referenced project, as described in the application, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, as amended, 42 U.S.C. 7401 *et. seq.*, the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

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

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

Date Signed: _____

ECB:JMS:jws

cc: Region 3
Lotus Notes
CES

TABLE OF CONTENTS

	<u>Page</u>
1.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED	3
2.0 FINDINGS	4
3.0 GENERAL CONDITIONS	6
3.1 General Requirements of MSSCAM	6
3.2 General Non-Applicability of Regulations of Concern	7
3.3 General Work Practice Requirements	7
3.4 General Recordkeeping Requirements	8
3.5 General Reporting Requirements	8
3.6 Road Cleaning Program	10
3.7 Authorization to Operate	13
4.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS	14
4.1 Coke Conveyance System	14
5.0 ATTACHMENTS	20
1 Project Emission Summary	20
2 Netting Analysis	21
3 Standard Permit Conditions	22
4a Existing Road Cleaning Program	24
4b Enhanced Road Cleaning Program	25

1.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

BACT	Best Available Control Technology
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic feet
gr	Grains
H ₂ SO ₄	Sulfuric Acid
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kg	Kilogram
LAER	Lowest Achievable Emission Rate
lb	Pound
mg	Milligram
mo	Month
MSSCAM	Major Stationary Sources Construction and Modification (35 Part IAC 203), also known as Nonattainment New Source Review (NA NSR)
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
scf	Standard Cubic Feet
scm	Standard Cubic Meter
SO ₂	Sulfur Dioxide
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	Year

2.0 FINDINGS

- 2.1 a. United States Steel ("USS") has applied for a coke conveyance project. This project would involve a new coke conveyance system that would be used in conjunction with the proposed Coke plant that would be operated by Gateway Energy & Coke Company, LLC ("Gateway"). Gateway's coke plant project and the USS coke conveyance system are considered a single overall combined larger project for purposes of applicability of New Source Review regulations.
 - b. Sun Coke, which owns Gateway, has requested a permit for the proposed heat recovery coke plant under a separate application (application number 06070020). The proposed Gateway plant would have the capability of producing up to 740,000 tons of furnace coke per year. The coke would be used at the neighboring USS in the production of iron or sold and transported to other locations. The coke plant would also recover waste heat from the coking process to produce steam for USS.
- 2.2 USS is located in an area designated nonattainment for ozone and PM_{2.5}. For purposes of Nonattainment New Source Review (NA NSR) regulations, PM₁₀ serves as a surrogate for PM_{2.5}, consistent with current USEPA guidance.
- 2.3 a. The project, i.e., the combination of the coke conveyance system and the heat recovery coke plant, is subject to 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM) for PM. This is because the net emissions increase for the project exceeds 15 tons per year of PM₁₀, as summarized in Attachment 2.
 - b.
 - i. This project is subject to PSD review as a major modification for PM and PM₁₀ emissions. This is because the net emissions increases for the project exceeds 25 tons per year of PM and 15 tons per year of PM₁₀, as summarized in Attachment 2.
 - ii. This project would not result in a significant increase in emissions of other PSD pollutants or nonattainment pollutants as summarized in Attachment 2.
- 2.4 After reviewing all the materials submitted by USS, the Illinois EPA has determined that the application for the coke conveyance system, as proposed, shows compliance with all applicable state and federal emission standards and utilization of Best Available Control Technology (BACT) and the Lowest Achievable Emission Rate (LAER) for emissions of particulate matter.
- 2.5 The air quality analysis submitted for the overall project and reviewed by the Illinois EPA shows that the proposed project will not cause violations of the ambient air quality standards for PM and PM₁₀.

- 2.6 USS and Gateway must obtain PM₁₀ offsets for this project from existing sources in the St. Louis/Metro-East nonattainment area. Based on the permitted PM₁₀ emissions of the overall project, 234.09 tons per year, at least 235 tons of PM₁₀ emissions offsets must be provided for this overall project; however, note that US Steel and Gateway have agreed to provide 267.77 tons of emission offsets as originally proposed.
- 2.7 The Illinois EPA has considered alternatives to this project, as required by 35 IAC 203.306.
- 2.8 Pursuant to 35 IAC 203.305, USS has demonstrated that all major stationary sources that it owns or operates in Illinois are in compliance or on a schedule for compliance with all applicable state and federal air pollution control requirements.

Note: SunCoke has stated that it does not own or operate any major sources in Illinois.

- 2.9 The Illinois EPA has determined that the application for the coke conveyance system, as proposed, would comply with all applicable Illinois Air Pollution Control Board Regulations and the federal Prevention of Significant Deterioration of Air Quality Regulations (PSD), 40 CFR 52.21.
- 2.10 A copy of the applications and the Illinois EPA's review of the applications and a draft of the permits were forwarded to a location in the vicinity of the plant, and the public was given notice and opportunity to examine this material, to submit comments, and to request and participate in a public hearing on this matter.

The Illinois EPA is issuing approval to construct the proposed coke conveyance system subject to the following conditions and consistent with the specifications and data included in the application. Any significant departure from terms expressed in the application would need to receive prior written authorization of the Illinois EPA.

3.0 GENERAL CONDITIONS

3.1 General Requirements of MSSCAM

3.1.1 Emissions Offsets

- a. USS and Gateway shall maintain 267.77 tons of PM₁₀ emission offsets generated by the following activities/projects:

Activity/Project	(Tons/Year)
Coke Oven Gas Desulfurization Project	31.74 ^a
Road Cleaning Program	236.03
Total:	267.77

^a The COG desulfurization project (excluding Boilers 1-10 shutdown and Slab Furnaces) results in a contemporaneous PM/PM₁₀ emission decrease of 94.15 tons, as further addressed in Construction Permit 06070022. Only a portion of this decreased, 31.74 tons, is being relied upon for use as an offset. This portion of the decrease is no longer available for future netting transactions.

- b. i. These emission reduction credits are provided by emission reductions occurring at the source (the Coke Oven Gas Desulfurization Project) and by emission reductions occurring in the vicinity of the source (the Road Cleaning Program, as addressed in Condition 3.6). These emission reductions have been relied upon by the Illinois EPA to issue the permits for this project and cannot be used as emission reduction credits for other purposes. The reductions have been made enforceable by this permit and by Construction Permit 06070022 which requires certain decreases in emissions in conjunction with the construction and operation of a coke oven gas desulfurization system for the existing by-product coke ovens and by-products plant at the source.
- ii. If the Permittee proposes to rely upon emission offsets from other sources or other activities/projects, the Permittee shall apply for and obtain a revision to this permit prior to relying on such emission offsets, which application shall be accompanied by detailed documentation for the nature and amount of those alternative emission offsets.
- c. The implementation of measures to provide emission offsets shall begin prior to startup of the new heat recovery coke plant.

Condition 3.1.3 represents the actions identified in conjunction with this project to ensure that the project is accompanied by emission offsets and does not interfere with reasonable further progress for PM_{2.5}.

3.2 General Non-Applicability of Regulations of Concern

3.2.1 PSD/NAA NSR

- a. The Permittee has addressed the applicability of 40 CFR 52.21, PSD and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM). The limits established by this permit are intended to ensure that the coke conveyance system does not constitute a major modification of the source pursuant to these rules for NO_x, CO, VOM, SO₂, and H₂SO₄ emissions (See also Attachments 1 and 2).
- b. This permit does not authorize changes in iron and steel making operations at the source that would increase emissions and is issued based upon no increase in emissions at existing units at the source as a result of this project.

3.3 General Work Practice Requirements

3.3.1 Operating Program

- a. Pursuant to 35 IAC 212.309, emission units in the coke conveyance system that are subject to a requirement in 35 IAC 212.304 through 212.308 or 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 IAC 212.310 and 212.312, and prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
 - i. As a minimum the operating program shall include the information and elements specified by 35 IAC 212.310, including: (1) a detailed description of the best management practices utilized to control fugitive dust; (2) estimated frequency of application of dust suppressants by location; and (3) such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
 - ii. This program shall also identify the specific control measures as may be needed to ensure that certain emission units comply with the opacity limits of 35 IAC 212.316.

- iii. Pursuant to 35 IAC 212.312, this operating program shall be amended by the Permittee to address the subject units in the coke conveyance system so that the operating program is current. This amendment shall be consistent with 35 IAC Part 212 Subpart K and shall be submitted to the Illinois EPA for its review.

3.4 General Recordkeeping Requirements

3.4.1 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

3.5 General Reporting Requirements

3.5.1 Reporting and Notifications Associated with Emissions Tests

- a. The Illinois EPA shall be notified prior to required emissions tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 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.
- b. At least 60 days prior to the actual date of required 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 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) that 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.
- c. Copies of the Final Reports(s) for required emissions tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
- i. A summary of results.
 - ii. General information.
 - iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.
 - iv. Detailed description of test conditions, including:
 - A. Process information.
 - B. Control equipment information, e.g., equipment condition and operating parameters during testing.
 - v. Data and calculations, including copies of all raw data sheets, opacity observation records and records of laboratory analyses, sample calculations, and data on equipment calibration.

3.5.2 Notification and Reporting of Deviations

- a. Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, notifications and reports for deviation from applicable emission standards and control requirements shall include at least the following information: the date and time of

the event, a description of the event, information on the magnitude of the deviation, a description of the corrective measures taken, and a description of any preventative measures taken to prevent future occurrences.

3.6 Road Cleaning Program

3.6.1 The Permittee shall enhance the existing fugitive dust control plan for off-site roads near the source, beginning before commencement of operation of the proposed heat recovery coke plant or by May 2009 whichever comes first, by adding the following road segments (the affected road segments) to be controlled and improving control measures for segments included in the plan, as follows, to provide an additional reduction in emissions of particulate matter, determined as PM10, of at least 236.03 tons per year, total, from baseline emission levels on these road segments prior to the proposed heat recovery coke oven (See also Attachment 4):

Road Segment	Segment Boundaries
Rock Road	Rte 3 & W. 20th St. (Overpass Approach)
"West" 20 th Street	Rte 3 & Rock Road
Rock Road	W. 20th & Benton St. (Railroad Overpass)
Niedringhaus	Benton St. & 16th St.
16th Street	Niedringhaus & Madison Ave.
Madison Ave*	16th & 20 th Street
"Central" 20th Street*	Madison St. & USS Gate
"East" 20th Street*	USS Gate & Rte 203
21st Street	Rte 203 and Monroe St.
"South" Edwardsville Rd (Rte 203)	20th & McCambridge Ave (Rte 203)
McCambridge Ave (Rte 203)	Edwardsville Rd (Rte 203) & 2nd St.
"North" Edwardsville Rd (Rte 203)	20th & Nameoki Rd (Rte 203)
Route 162	Nameoki Rd (Rte 203) & Railroad Tracks
Benton Street	Rock Rd. and Niedringhaus

* All or a portion of this road segment is addressed by the existing program for "Off-site Dust Control," as addressed by Condition 30 of Construction Permit 95010001. Credit shall only be taken for the incremental reduction in emissions of the road segment from the enhanced cleaning of the segment required by this permit, beyond the weekly or monthly sweeping as required under the existing program.

3.6.2 Control Requirements

- a. Good air pollution control practices shall be implemented to minimize and significantly reduce nuisance dust from affected road segments.
- b. Cleaning of affected road segments shall be performed using vacuum cleaning equipment (such as Enviro-Whirl). Any

collection air vented to the atmosphere from cleaning equipment shall be filtered prior to venting. The handling of material collected by equipment during road cleaning shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods to control PM emissions from transfer of material for disposal.

- c. Affected road segments shall be cleaned on the following frequency except during extended periods of inclement weather that act to prevent emissions of fugitive dust from the affected road segments:

- i. Cleaning on a twice weekly basis:

Road Segment	Segment Boundaries
Madison Ave	16th & 20th Streets
Central 20th Street	Madison St. & USS Gate
East 20th Street	USS Gate & Rte 203
21st Street	Rte 203 and Monroe St.
North Edwardsville Rd	20th & Nameoki (Rte 203)

- ii. Cleaning on a twice monthly basis:

Road Segment	Segment Boundaries
Rock Road	Rte 3 & W. 20th St. (Overpass Approach)
West 20th St.	Rte 3 & Rock Road
Rock Road	W. 20th & Benton St. (Railroad Overpass)
Niedringhaus	Benton St. and 16th St.
16th Street	Niedringhaus & Madison St.
South Edwardsville Rd	20th & McCambridge Ave (Rte 203)
McCambridge Ave	Edwardsville Rd (Rte 203) & 2nd St.
Route 162	Nameoki Rd (Rte 203) & Railroad Tracks
Benton Street*	Rock Rd. and Niedringhaus

3.6.3 Silt Loading Measurements

- a. The Permittee shall conduct measurements of the silt loading on affected segments, with sampling and analysis conducted using the "Procedures for Sampling Surface/Bulk Dust Loading," Appendix C.1 in *Compilation of Air Pollutant Emission Factors*, USEPA, AP-42. A series of samples shall be taken to determine the average silt loading under representative conditions on the road segment and address the change in silt loadings as related to the amount and nature of vehicle traffic.
- b. Measurements shall be performed by the following dates:
 - i. Measurements for "uncontrolled" silt loadings shall be completed prior to initiating the program required by Condition 3.6, i.e., the Road Cleaning Program,

unless other measurements are approved by the Illinois EPA.

- ii. Measurements for "controlled" silt loadings shall be conducted between 30 and 90 days following the initiation of the program required by Condition 3.6, i.e., the Road Cleaning Program.
 - iii. Measurements for "controlled" silt loading shall thereafter be repeated at least every three years.
 - iv. Measurements for "controlled" silt loadings shall be conducted upon written request by the Illinois EPA, as specified in the request, which shall be completed within 75 days of the Illinois EPA's request.
- c. The Permittee shall submit test plans, test notifications and test reports for these measurements as specified by General Condition 3.5, provided, however, that once a test plan has been accepted by the Illinois EPA, a new test plan need not be submitted if the accepted plan will be followed or a new test plan is requested by the Illinois EPA.
 - d. The Permittee shall keep records of the silt measurements conducted pursuant to this condition, including records for the sampling and analysis activities and results.

3.6.4 Recordkeeping Requirements

- a. The Permittee shall keep a record describing the Road Cleaning Program that at a minimum: identify any contractors implementing the program for the Permittee and their duties for implementing the Program under the contract; the equipment used by the Permittee or its contractor for cleaning roads, including for each item of equipment, a description of and the manufacturer's specifications for collection of silt from roadways and control of dust emissions from the cleaning process; and the standards practices that are used to clean roads under the Program, such as type of equipment, and speed of travel.
- b. The Permittee shall keep records for implementation of the Road Cleaning Program that at a minimum: Identify each time that an affected road segment was cleaned, with a description of any circumstances that may have affected the extent or nature of cleaning; and identify each time that scheduled cleaning was not performed, with detailed explanation.
- c. The Permittee shall keep records documenting proper maintenance and repair of road cleaning equipment as

related to collection of silt and control of emissions from the cleaning process.

- d. If the records for the Road Cleaning Program required by Condition 3.6.4(b) and (c) are maintained by a contractor on behalf of the Permittee, the Permittee shall periodically obtain copies of relevant records and document its review of the implementation of the Program.
- e. The Permittee shall keep a record containing calculations and appropriate analysis for the annual reduction in emissions that is achieved by the Road Cleaning Program, with emissions calculation performed in accordance with the methodology set forth in Section 13.2.1 of AP-42, to verify that the Program is achieving the required reduction in emissions compared to baseline levels. This record shall be prepared in conjunction with the measurements of "controlled" silt loadings required by Condition 3.6.3(a). A copy of this record shall be submitted to the Illinois EPA each time it is prepared.

3.6.5 Reporting Requirements

- a. The Permittee shall submit an annual report to the Illinois EPA with its Annual Emission Report describing the implementation of the Road Cleaning Program during the previous year. This report shall at a minimum provide: the number of times each road segment was cleaned; the number of times that scheduled cleaning was not performed, with explanation; a description of any significant changes in road cleaning equipment or cleaning practices, with explanation; and a description of other significant changes to the Program, including changes in contractors.

3.7 Authorization to Operate

The emission units addressed by this construction permit may be operated under this permit until they have been incorporated into the source's issued CAAPP permit provided that a timely and complete CAAPP permit application has been submitted.

4.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

4.1 Coke Conveyance System

4.1.1 Description

The coke conveyance system would transfer coke via conveyors from Gateway to US Steel to be used in the existing Blast Furnaces. Conveyors would be enclosed/covered to minimize particulate emissions. Water spraying or other comparable measures would also be used to minimize emissions during loading and unloading activities at sources such as the coke pile and during transfer of the coke from the conveyor to the coke pile. Other parts of the system may include vibratory feeders, transfer tower for truck loading, day bins, highline loading conveyor, feed hopper, and reclaim hopper using front end loaders or other equipment.

4.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Coke Conveyor System	Conveyor system and ancillary equipment designed to move the coke from Gateway to Granite City Works	Enclosures for Conveyors; Fabric Filters for Day Bins; Water Spraying

4.1.3 Applicable Provisions and Regulations

- a. An "affected unit" for the purpose of these unit-specific conditions, is an emission unit that is part of the coke conveyance system described in Conditions 4.1.1 and 4.1.2.
- b. The affected units are subject to 35 IAC Part 212 Subpart K: Fugitive Particulate Matter, which establishes the following requirements for the affected units:
 - i. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods [35 IAC 212.307].
 - ii. Conveyor transfer points and conveyors shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program (See Condition 3.3) [35 IAC 212.308].

- iii. Emissions from particulate collection equipment shall not exceed 0.03 gr/dscf [35 IAC 212.313] (See also Condition 4.1.3(d)).
 - iv. No person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent [35 IAC 212.316(d)].
 - v. No person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent [35 IAC 212.316(f)].
 - vi. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- c.
 - i. The affected unit is subject to 35 IAC 212.324(b), which provides no person shall cause or allow the emission into the atmosphere, of PM₁₀ from any process emission units to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period (See also Condition 4.1.3(d)).
 - ii. Pursuant to 35 IAC 212.324(d), the above mass emission limit shall not apply to an emission unit if it has no visible emissions other than fugitive particulate matter, provided, however, that this exception is not a defense to a finding of violation of the above mass limit determined by emission testing.
 - d. The affected units are subject to 35 IAC 212.458: Emission Units in Certain Areas, which provides that no person shall cause or allow emissions of PM₁₀, other than that of fugitive particulate matter, into the atmosphere to exceed, during any one hour period, 22.9 mg/scm (0.01 gr/scf) from any process emissions unit, except as otherwise provided in 35 IAC 212.458 or in 35 IAC 212.443 and 212.446 [35 IAC 212.458(b)(7)].
 - e. The affected units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar new process emission units, at a source or premises, exceeds the allowable emission

rates specified in 35 IAC 212.321 (c) or calculated in accordance with 35 IAC 212.321(b).

4.1.4 Non-Applicability of Regulations of Concern

- a. The affected units are not subject to the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR Part 60 Subpart 000, because coke is not a nonmetallic mineral as defined in 40 CFR 60.671.

4.1.5 Control Requirements and Work Practices

- a. BACT/LAER Technology
 - i. PM and PM₁₀ emissions from the day bins shall be controlled by:
 - A. Enclosure of the daybin so as to prevent visible fugitive emissions, as defined by 40 CFR 60.671.
 - B. Aspiration of the daybins or the enclosure in which they are enclosed to a control device, which device shall be operated in accordance with good air pollution control practice to minimize emissions. For this purpose, the control device shall be a baghouse or other filtration type device unless the Permittee demonstrates and the Illinois EPA concurs that another type of control device is preferable due to considerations of operational safety.
 - ii. PM and PM₁₀ emissions from conveyors shall be controlled by enclosure so as to prevent visible fugitive emissions, as defined by 40 CFR 60.671.
 - iii. Emissions of PM and PM₁₀ from the control devices for the affected units shall not exceed 0.005 gr/dscf.

Condition 4.1.5(a) represents the application of the Best Available Control Technology and Lowest Achievable Emission Rate.

- b. The Permittee shall implement and maintain control measures for the affected units that minimize visible emissions of PM and provide assurance of compliance with the applicable limits and standards in Conditions 4.1.3 and 4.1.5(a).
- c. The affected unit shall be operated and maintained in accordance with good air pollution control practice to minimize emissions.

4.1.6 Production and Emission Limitations

- a. The affected conveyor system shall not transfer more than 740,000 tons of coke per year.
- b. The emissions from the affected conveyor system shall not exceed 0.95 tons/year of PM and 0.45 tons/year of PM₁₀.
- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

4.1.7 Testing Requirements

- a. Within 180 days of initial startup of the affected unit, the stack emissions of PM₁₀ from the control devices for the affected units 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
PM ₁₀	USEPA Method 201A*

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

4.1.8 Inspection Requirements

- a. The Permittee shall conduct inspections of the affected units on at least a monthly basis with personnel who are not directly responsible for the day-to-day operation of these units (e.g., maintenance personnel, supervisory personnel, environmental staff, etc.), for the specific purpose of verifying that the measures identified in the operating program and other measures required to control emissions from affected units are being properly implemented.
- b. These inspections shall include observation for the presence of visible emissions, performed in accordance with USEPA Method 22, from buildings in which the affected units are located and from units from which the Permittee has elected to demonstrate no visible emissions.

4.1.9 Recordkeeping Requirements

- a. The Permittee shall maintain a file, which shall be kept current, that contains the maximum operating capacity of the affected conveyor system (tons/day).
- b.
 - i. The Permittee shall keep inspection and maintenance log(s) or other records for the control measures associated with the affected units, including enclosures and fabric filters.
 - ii. These records shall include the following information for the inspections required by Condition 4.1.8(a) and (b):
 - A. Date and time the inspection was performed and name(s) of inspection personnel.
 - B. The observed condition of the control measures for the affected unit, including the presence of any visible emissions.
 - C. A description of any maintenance or repair associated with established control measures that are recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.
- c. The Permittee shall maintain the following records for the emissions of the affected units:
 - i. A file containing the standard emission factors used by the Permittee to determine PM/PM₁₀ emissions from the affected units, with supporting documentation.
 - ii. Records of PM/PM₁₀ emissions based on operating data for the affected units and appropriate emission factors, with supporting documentation and calculations.
- d. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected units that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the identity of the observer, a description of the measurements that were made, the operating condition of the affected unit, the observed

opacity, and copies of the raw data sheets for the measurements.

4.1.10 Reporting Requirements

a. Notifications

- i. The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable emission standards or operating requirements for the affected units that continue* for more than 24 hours. These notifications shall include the information specified by Condition 3.5.2.

* For this purpose, time shall be measured from the start of a particular event. The absence of a deviation for a short period shall not be considered to end the event if the deviation resumes. In such circumstances, the event shall be considered to continue until corrective actions are taken so that the deviation ceases or the Permittee takes the affected unit out of service for repairs.

b. Reports

- i. The Permittee shall submit quarterly reports to the Illinois EPA for all deviations from requirements set by this permit. These notifications shall include the information specified by Condition 3.5.2.

5.0 ATTACHMENTS

Attachment 1: Project Emission Summary (Tons/Year)

Operation	NO _x	CO	SO ₂	VOM	PM	PM ₁₀	Lead	H ₂ SO ₄
Gateway Increase	577.40	154.76	1,406.36	37.49	291.80	233.64	0.20	31.02
USS Conveyor Increase	---	---	---	---	0.95	0.45	---	---
PROJECT EMISSIONS:	577.40	154.76	1,406.36	37.49	292.75	234.09	0.20	31.02
Significance Threshold:	40	100	40	40	25	15	0.6	7
Greater Than Significant?	Yes	Yes	Yes	No	Yes	Yes	No	Yes

Attachment 2: Netting Analysis (Tons/Year)

	NO _x (NA NSR)	NO _x (PSD)	CO	SO ₂	VOM	PM	PM ₁₀ /PM _{2.5}	Lead	H ₂ SO ₄
Project Emissions	577.40	577.40	154.76	1,406.36	37.49	292.75	234.09	0.20	31.02
Contemporaneous ^a Increases									
BFG Boiler/Flare (06070023)	124.74	124.74	338.36	451.14	0.92	232.25	232.25	---	---
NG Enrichment (04110018)	17.22	17.22	5.17	0.04	0.34	0.73	0.62	---	---
Slab Furnaces (06070022)	---	---	26.77	---	1.75	43.43	43.43	---	---
Contemporaneous ^a Decreases									
Boilers 1-10 (06070022)	-278.89	-278.89	-313.61	-789.43	-1.22	-228.06	-228.06	---	---
COG Desulf (06070022)	---	---	---	-2,107.95	---	-94.15	-94.15 ^b	---	-63.11
Slab Furnaces (06070022)	-427.94	-427.94	---	-174.15	---	---	---	---	---
No. 6 Galv. Line (06070023)	-38.48	-38.48	-10.36	-0.07	-0.68	-0.94	-0.94	---	---
No. 4 COG Pump (06070023)	-77.30	-77.30	-117.97	-0.02	-0.99	-0.64	-0.64	---	---
NET EMISSIONS CHANGE	-103.25	-103.25	83.12	-1,214.08	37.61	245.37	186.60	0.20	-32.09
Significance Threshold:	40	40	100	40	40	25	15	0.6	7
Greater Than Significant?	No	No	No	No	No	Yes	Yes	No	No

Notes:

^a The contemporaneous time period for PSD pollutants is April 2002 through July 2008. The contemporaneous time period for NA NSR pollutants is July 2001 through July 2008.

^b The COG desulfurization project (excludes Boilers 1-10 shutdown and Slab Furnaces) results in a contemporaneous PM/PM₁₀ emission decrease of 94.15 tons. 31.74 tons of this decrease is being relied upon for use as an offset. This portion of the decrease is no longer available, e.g., future netting transactions.

Attachment 3: Standard Permit Conditions

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

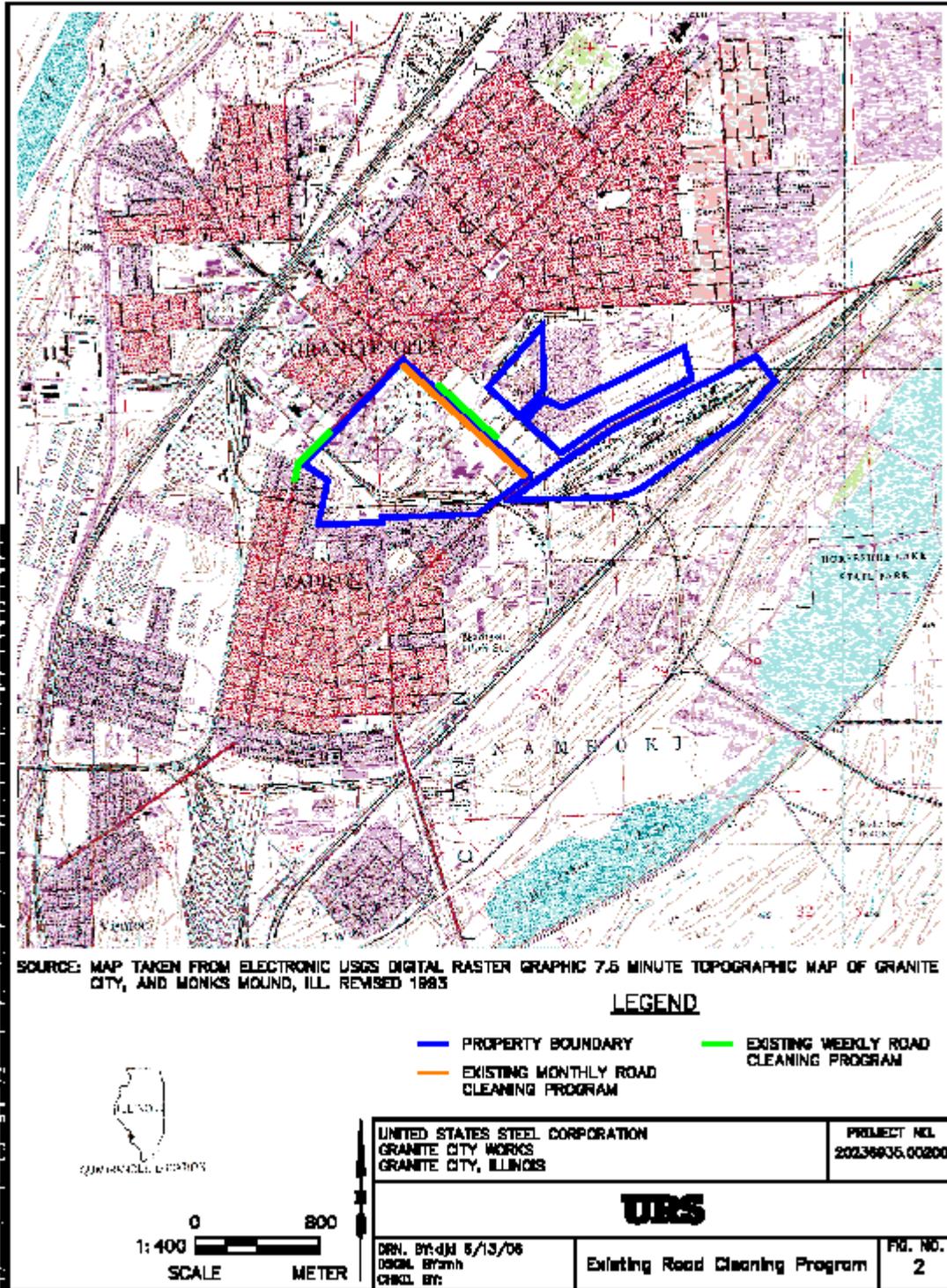
The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits, which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Illinois EPA and a supplemental written permit issued.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. To obtain and remove samples of any discharge or emissions of pollutants, and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:
 - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities.
 - c. Does not release the Permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations.
 - d. Does not take into consideration or attest to the structural stability of any units or parts of the project, and
 - e. In no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Illinois EPA before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
7. The Illinois EPA may file a complaint with the Board for modification, suspension or revocation of a permit.
 - a. Upon discovery that the permit application contained misrepresentations, misinformation or false statement or that all relevant facts were not disclosed, or
 - b. Upon finding that any standard or special conditions have been violated, or
 - c. Upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Attachment 4a: Existing Road Cleaning Program



Attachment 4b: Enhanced Road Cleaning Program

