

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

ICG Illinois, LLC - Viper Mine
Attn: Kayla Primm
8100 East Main Street
Williamsville, Illinois 62693

Application No.: 83030030

I.D. No.: 107806AAB

Applicant's Designation: RAW LOADOUT

Date Received: December 5, 2007

Subject: Coal Processing Operation

Date Issued: October 5, 2010

Expiration Date: October 5, 2015

Location: 781 600th Street, Elkhart, Logan County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

HAC to Cross Belt
Cross Belt to Raw Coal Belt
Raw Coal Belt to Raw Silo
Raw Silo to Plant Feed
Cross Belt To Stockpile
Stockpile to Reclaim Belt
Reclaim Belt to Plant Feed
Preparation Plant
Plant to Stoker Silo
Stoker Silo to Trucks
Ash Trucks to Ash Bin #1
Ash Bin to Refuse Belt
Refuse Belt to Bin
Refuse Bin to Scrapers
Clean Belt to Stacker
Stacker to Clean Stockpile
Clean Stockpile to Reclaim
Reclaim to Clean Coal Belt
Clean Coal Belt to Silo
Silo to Loadout Belt
Loadout Belt to Loadout
Loadout to Trucks

HAC to Cross Conveyor
Cross Conveyor to Crusher Conveyor & Raw Coal Stockpile Conveyor
Crusher Conveyor to Crusher Building
Crusher Building to Raw Coal Stockpile Conveyor
Raw Coal Stockpile Conveyor to Raw Stockpile
Open Raw Coal Stockpile
Raw Coal Stockpile to Reclaim Conveyor
Reclaim Conveyor to Reclaim Hopper
Reclaim Hopper to Raw Coal Conveyor

Raw Coal Conveyor to Receiving Conveyor
Receiving Conveyor to Transfer Conveyor
Transfer Conveyor to Loadout
Loadout to Trucks

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/yr for Particulate Matter less than 10 microns (PM₁₀)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permits issued for this location.
- 2a. These coal processing operations are subject to New Source Performance Standard (NSPS) for Coal Preparation Plants, 40 CFR Part 60, Subparts A and Y. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. Pursuant to 40 CFR 60.252(c), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, an owner or operator subject to the provisions of 40 CFR 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.
 - c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, 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 toward the zenith at a point beyond the property line of the source.
- d. Pursuant to 35 Ill. Adm. Code 212.321(a), 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 process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 4a. The surface moisture content of the coal as processed shall be at least 10% by weight. The Permittee shall show compliance with this requirement as follows:
 - i. Water sprays shall be used on the emission units associated with the crushing plant (e.g., crushers, conveyors, and stockpiles, etc.) as necessary, except when weather conditions are below or expected to fall below freezing temperatures, to produce a moisture content of 1.5% by weight or higher to reduce particulate matter emissions; or
 - ii. Demonstrate compliance with Condition 4(a) by following the testing requirements of Condition 10(a).
- 5a. Emissions and operation of the coal processing plant shall not exceed the following limits:

<u>Process Emission Unit</u>	<u>Throughput</u>		<u>PM₁₀ Emissions</u>			<u>PM Emissions</u>		
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(lb/T)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(lb/T)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
HAC-Cross Belt	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Cross Belt-Raw Belt	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Raw Coal Belt-Silo	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Raw Silo-Plant Feed	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Cross Belt-Stockpile	20,000	200,000	0.001	0.01	0.02	0.022	0.02	0.22
Stockpile-Reclaim Belt	20,000	200,000	0.001	0.01	0.02	0.022	0.02	0.22

Process Emission Unit	Throughput		PM ₁₀ Emissions			PM Emissions		
	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)	(lb/T)	(T/Mo)	(T/Yr)
Preparation Plant	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Plant-Stoker	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Stoker Silo-Trucks	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Ash Truck-Ash Bin	500,000	5,000,000	0.001	0.03	0.25	0.022	0.55	5.50
Ash Bin-Refuse Belt	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Refuse Belt-Bin	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Refuse Bin-Scrapers	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Clean Bin-Stacker	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Stacker-Clean Stockpile	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Clean Stockpile- Reclaim	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Reclaim Clean-Clean Coal Belt	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Clean Coal Belt-Silo	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Silo-Loadout Belt	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Loadout-Trucks	500,000	5,000,000	0.005	0.13	1.25	0.040	1.00	10.00
HAC-Cross Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Cross Conveyor-Crusher & Raw Coal Stockpile Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Crush Conveyor-Crusher Building	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Crusher Building-Raw Coal Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Raw Stockpile Con.-Raw Stockpile	20,000	200,000	0.005	0.01	0.02	0.022	0.02	0.22
Raw Stockpile-Reclaim Conveyor	20,000	200,000	0.005	0.01	0.02	0.022	0.02	0.22
Reclaim Con.-Reclaim Hopper	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Reclaim Hopper-Raw Coal Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Raw Coal Con.- Receiving Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.022	0.55	5.50
Receiving Con.- Transfer Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.040	1.00	10.00
Transfer Con.-Loadout Conveyor	500,000	5,000,000	0.005	0.13	1.25	0.040	1.00	10.00
Loadout-Trucks	500,000	5,000,000	0.005	<u>0.13</u>	<u>1.25</u>	0.040	<u>1.00</u>	<u>10.00</u>
			Total:	2.88	27.08		17.29	172.88

These limits are based on the maximum coal throughput rate (571 tons/hour), maximum operating hours (8,760 hours/year), standard emission factors (SCC ,#3-05-010-08, 3-05-010-09, 3-05-010-10, 3-05-010-12,3-05-010-14, 3-05-010-38, FIRE, Version 6.25, September 2004), control efficiencies of 90% each for water sprays (minimum moisture

content of 10%) and enclosures, and information provided in the above mentioned application.

- b. Compliance with the annual limits of this permit 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).
- 6a. Pursuant to 40 CFR 60.8(a), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).
- b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
 - i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - ii. Approves the use of an equivalent method;
 - iii. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
 - iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or
 - v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.
- c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- d. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior

notice of any performance test, except as specified under other subparts, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

- e. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - i. Sampling ports adequate for test methods applicable to such facility. This includes:
 - A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures; and
 - B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - ii. Safe sampling platform(s).
 - iii. Safe access to sampling platform(s).
 - iv. Utilities for sampling and testing equipment.
- f. Pursuant to 40 CFR 60.8(f), unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.
- 7a. Pursuant to 40 CFR 60.254(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60

or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

- b. Pursuant to 40 CFR 60.254(b), the owner or operator shall determine compliance with the particular matter standards in 40 CFR 60.252 as follows:
 - i. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.
 - ii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

- 8a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Condition 9 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

9. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 10a. The moisture content of a representative sample of the aggregate processed in the crushing plant associated with the affected drum-mix asphalt plant shall be measured at least one per week using ASTM Procedures (C566-67) for total moisture content of material.
 - b. If the Permittee is relying on Condition 4(a)(i) to demonstrate compliance with Condition 4(a), the Permittee shall monitor for the water spray equipment as follows:
 - i. The water supply to the spray equipment shall be equipped with a metering device used to determine water usage for the control of particulate matter emissions.
 - ii. Inspections of water spray equipment and operation (such as leaking, maintaining adequate flow, clogging of flow lines, etc.) shall be performed at least once per week when the crushing plant associated with the affected drum-mix asphalt plant is in operation.
- 11a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative..
 - b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
12. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

- 13a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the coal processing plant:
 - A. If the Permittee is relying on the requirements of Condition 10(a) to demonstrate compliance with Condition 4(a), the Permittee shall maintain records of all moisture content tests performed, including date, time, individual performing test, location of sample (e.g., prior to crushing, as shipped, etc.).
 - B. If the Permittee is relying on Condition 10(b) to demonstrate compliance with Condition 4(a), the Permittee shall maintain operating logs for the water spray equipment, including dates and times of usage, malfunctions (type, date and measures taken to correct), water pressure, and dates when there was at least 0.25" of rainfall during the preceding 24 hours and the water spray equipment was not operated; and
 - C. The Permittee shall maintain weekly records of water consumption in the spray equipment, as determined by the meter required by Condition 10(b)(1) and amount of precipitation specified in Condition 13(a)(i)(B).
 - ii. Coal throughput (tons/month, tons/year); and
 - iii. Monthly and annual PM₁₀ and PM emissions from the source, with supporting calculations (tons/month, tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.
14. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 15a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance

Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

- b. Two (2) copies 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

and one (1) 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
5415 North University
Peoria, Illinois 61614

This permit has been revised to include operation of the equipment described in Construction Permit No. 07120009.

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

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

Date Signed: _____

ECB:GB:psj

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from this processing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons per year for PM₁₀) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>Process</u> <u>Emission Unit</u>	<u>Emissions</u> <u>(Tons/year)</u>	
	<u>PM</u>	<u>PM₁₀</u>
HAC - Cross Belt	5.50	0.25
Cross Belt - Raw coal Belt	5.50	0.25
Raw Coal Belt - Silo	5.50	0.25
Raw Silo - Plant Feed	5.50	0.25
Cross Belt - Stockpile	0.22	0.02
Stockpile - Reclaim Belt	0.22	0.02
Preparation Plant	5.50	0.25
Plant - Stoker	5.50	0.25
Stoker Silo - Trucks	5.50	0.25
Ash Truck - Ash Bin	5.50	0.25
Ash Bin - Refuse Belt	5.50	1.25
Refuse Belt - Bin	5.50	1.25
Refuse Bin - Scrapers	5.50	1.25
Clean Bin - Stacker	5.50	1.25
Stacker - Clean Stockpile	5.50	1.25
Clean Stockpile - Reclaim	5.50	1.25
Reclaim Clean - Clean Coal Belt	5.50	1.25
Clean Coal Belt - Silo	5.50	1.25
Silo - Loadout Belt	5.50	1.25
Loadout - Trucks	10.00	1.25
HAC-Cross Conveyor	5.50	1.25
Cross Conveyor-Crusher & Raw Coal Stockpile Conveyor	5.50	1.25
Crush Conveyor-Crusher Building	5.50	1.25
Crusher Building-Raw Coal Conveyor	5.50	1.25
Raw Stockpile Conveyor-Raw Stockpile	0.22	0.02
Raw Stockpile-Reclaim Conveyor	0.22	0.02
Reclaim Conveyor-Reclaim Hopper	5.50	1.25
Reclaim Hopper-Raw Coal Conveyor	5.50	1.25
Raw Coal Conveyor-Receiving Conveyor	5.50	1.25
Receiving Conveyor-Transfer Conveyor	10.00	1.25
Transfer Conveyor-Loadout Conveyor	10.00	1.25
Loadout - Trucks	10.00	1.25
Total	<u>172.88</u>	<u>27.08</u>

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