



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

October 4, 2013

Ms. Ramona Schneider
Haile Gold Mine
7283 Haile Gold Mine Road, PO Box 128
Kershaw, SC 29067

Re: Construction Permit No. 1460-0070-CA

Dear Ms. Schneider:

Enclosed is Construction Permit No. 1460-0070-CA. This construction permit is being issued in accordance with the plans, specifications and other information submitted in the construction permit application, as amended.

In addition to this permit to construct, a permit to operate is required in accordance with *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*. The regulations require a written request for a new or revised operating permit to cover any new or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source unless a more stringent time frame is required.

Please note the emissions limitations and operational requirements contained within this permit. It is important for you and/or an authorized representative responsible for the overall operation of this facility to read this issued permit carefully and to understand all requirements. If any errors or omissions are discovered, please notify Kirk Schneider of my staff, via e-mail at Schneikg@dhec.sc.gov, or call (803) 898-4023 immediately.

Pursuant to the South Carolina Administrative Procedures Act, any Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by the applicant, permittee, licensee, or affected person. Please see the enclosed "Guide to Board Review" for guidelines on filing an appeal.

Sincerely,

Elizabeth J. Basil
Director, Engineering Services Division, Bureau of Air Quality

EJB:kgs:el
Enclosure

cc: Permit File: 1460-0070
ec: Steve Mosley, BEHS
Michael Shroup, Source Evaluation
Heinz Kaiser, Air Toxics

South Carolina Board of Health and Environmental Control
Guide to Board Review
Pursuant to S.C. Code Ann. § 44-1-60
Effective April 1, 2013

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of \$100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars (\$100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
 - The grounds for amending, modifying, or rescinding the staff decision;
 - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
 - the relief requested; and
 - a copy of the decision for which review is requested.
3. RFRs should be filed in person or by mail at the following address:

South Carolina Board of Health and Environmental Control
Attention: Clerk of the Board
2600 Bull Street
Columbia, South Carolina 29201

Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).

4. The filing fee may be paid by cash, certified check or credit card. If a RFR is filed by facsimile or electronic mail, the filing fee may be mailed to the Clerk of the Board and the envelope must be postmarked within the time allowed for filing a RFR.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor.
7. The Clerk will email the RFR to staff and Office of General Council and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. Contested case guidance will be included with the letter.

NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

8. If the RFR is to be considered by the RFR Committee, the Clerk will notify the Presiding Member of the RFR Committee and the Chairman that further review is requested by the Board.
9. Following RFR Committee or Board consideration of the RFR, if it is determined no Conference will be held, the Clerk will send a letter by certified mail to the Requester, with copy by regular mail to the applicant, permittee, or licensee if not the Requestor, stating the Board will not hold a Conference. Contested case guidance will be included with the letter.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.
2. The Clerk will request Department staff provide the Administrative Record.
3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publically noticed and should:
 - include the place, date and time of the Conference;
 - state the presentation times allowed in the Conference;
 - state evidence may be presented at the Conference;
 - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
 - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.
4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. Final Review Conference and Decision

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
 - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
 - Type of decision (permit, enforcement, etc.) and description of the program.
 - Parties
 - Description of facility/site
 - Applicable statutes and regulations
 - Decision and materials relied upon in the administrative record to support the staff decision.
 - Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] *NOTE: The burden of proof is on the Requestor(s)*
 - Rebuttal by Department staff [15 minutes]
 - Rebuttal by Requestor(s) [10 minutes]
Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.
2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.



PROMOTE PROTECT PROSPER

South Carolina Department of Health
and Environmental Control

Office of Environmental Quality Control

Bureau of Air Quality

State Construction Permit

Haile Gold Mine
7283 Haile Gold Mine Road, PO Box 128
Kershaw, S.C. 29067
Lancaster County

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the 1976 *Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on September 7, 2012, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The construction and subsequent operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: 1460-0070-CA
Issue Date: October 4, 2013

Director, Engineering Services Division
Bureau of Air Quality

Haile Gold Mine
1460-0070-CA
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A. PROJECT DESCRIPTION

Permission is hereby granted to construct a Gold Mine that will include open pit mining of gold containing ore and an ore processing plant. Conventional open pit mining methods will be used to provide approximately 33.6 million tons of ore over the life of the mine. The ore will then be processed using physical and chemical separation techniques to extract gold and silver in the ore processing plant.

B. EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
PT-1	24,000 tpd Primary Crusher including Load-In/Load-Out with 3 sided enclosure	CD-WS	PT-1
PT-2	24,000 tpd Crusher Conveyor Transfer to Stockpile Feed Conveyor	CD-WS	PT-2
PT-3	24,000 tpd Stockpile Feed Conveyor Transfer to Coarse Ore Stockpile	CD-WS	PT-3
PT-4	9,120 tpd Conveyor Transfer to SAG Mill	CD-WS	PT-4
PT-5a	Carbon Regeneration Kiln Eight 275,000 Btu/hr Burners (2.2E+06 Btu/hr Total) Natural Gas as Fuel	CD-PT-5a	PT-5a
PT-5b	Electrowinning Cells, Pregnant and Barren Tanks	CD-PT-5b	PT-5b
PT-6	0.25 tph Electric Melting Furnace with Product Recovery Baghouse	None	PT-6
PT-7	75 ton Reagent Area Lime Silo	CD-PT-7	PT-7
PT-8	1,500 kW (2,012 Hp) Diesel Engine Powered Emergency Generator	None	PT-8
PT-7a	Reagent Area Lime Slaker	CD-PT-7a	PT-7a
PT-9	8 Diesel Engine Powered Trailer Mounted Lighting Systems 10 kW Each (13.4 Hp Each)	None	PT-9
PT-10	150 ton Overburden Lime Silo	CD-PT-10	PT-10
PT-11	58.5 tpd Lime Drop to Truck Bed	None	PT-11
PT-15	5 Diesel Powered Sump Pump Engines 335 Hp (250 kW) Each	None	PT-15
PT-16	12.50E+06 Btu/hr Natural Gas Fired Thermal Fluid Heater	None	PT-16
PT-17	149 Hp Fire Water Pump Engine	None	PT-17
T-1	8 Carbon-in-Leach Tanks and Cyanide Recovery Thickener	None	T-1
T-2	5,000 gallon Hydrochloric Acid (HCl) Storage Tank	CD-CS	T-2
T-3	5,000 gallon Sulfuric Acid (H ₂ SO ₄) Storage Tank	None	T-3
T-4	5,000 gallon Sodium Hydroxide (NaOH) Storage Tank	None	T-4
T-5	Potassium Amyl Xanthate Storage Tank	None	T-5

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C. CONTROL DEVICES

Control Device ID	Control Device Description	Pollutant(s) Controlled
CD-WS	Wet Suppression	PM, PM _{2.5} , PM ₁₀
CD-PT-5a	Wet Scrubber PT-5a	PM, PM _{2.5} , PM ₁₀
CD-PT-5b	Wet Scrubber PT-5b	NH ₃
CD-PT-7	Reagent Area Lime Silo Bin Vent Filter	PM, PM _{2.5} , PM ₁₀
CD-PT-7a	Reagent Area Lime Slaker Wet Scrubber	PM, PM _{2.5} , PM ₁₀
CD-PT-10	Overburden Lime Silo Bin Vent Filter	PM, PM _{2.5} , PM ₁₀
CD-CS	Caustic Scrubber	HCl

D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.1	<p>Equipment/Control Device ID: All</p> <p>(S.C. Regulation 61-62.1, Section II.J) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. An owner/operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods, at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years and shall be made available to a Department representative upon request.</p>
D.2	<p>Equipment/Control Device ID: CD-WS, CD-PT-5a, CD-PT-5b, CD-PT-7, CD-PT-7a, CD-PT-10, CD-CS</p> <p>The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance 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 in a permanent form suitable for inspection by Department personnel.</p>
D.3	<p>Equipment/Control Device ID: CD-PT-5a, CD-PT-5b, CD-PT-7a, CD-CS</p> <p>All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.70.7.</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.4	<p>Equipment/Control Device ID: PT-5a, PT-5b, PT-6</p> <p>For any source test required under an applicable standard or permit condition, the owner/operator shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.</p> <p>Site-specific test plans and amendments, notifications, and source test reports shall be submitted to the Manager of the Source Evaluation Section, Bureau of Air Quality.</p>
D.5	<p>Equipment/Control Device ID: PT-5a, PT-6, PT-7, PT-7a, PT-10, PT-11, CD-PT-5a, CD-PT-7a</p> <p>(A) (S.C. Regulation 61-62.5, Standard No.4, Section IX) Where construction or modification began after December 31, 1985, emissions from the Primary Carbon Regeneration Kiln (PT-5a), Electric Melting Furnace (PT-6), Reagent Area Lime Silo (PT-7), Reagent Area Lime Slaker (PT-7a), Overburden Lime Silo (PT-10) and Lime Drop to Truck Bed (PT-11) (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p>(B) (S.C. Regulation 61-62.5, Standard No.4, Section VII) The maximum allowable opacity from the furnace building (including but not limited to pollution control systems, louvers, doors, openings, etc.) shall be 20%.</p> <p>(C) Compliance with the opacity limits in (A) and (B) shall be demonstrated as follows:</p> <p>(C)(1) By complying with the Fugitive Dust Control plan.</p> <p>(C)(2) By performing visual emission checks of the Reagent Area Lime Silo and Overburden Lime Silo during each loading operation and keeping the Reagent Area Lime Silo Bin Vent Filter and Overburden Lime Silo Bin Vent Filter in place and operational. Operation and maintenance checks shall be made on each bin vent for proper operation according to manufacturer recommendations. Each check shall be recorded in a log and this log shall include a dated record of all problems, corrective actions and maintenance activities.</p> <p>(C)(3) By operating Wet Scrubber PT-5a and Wet Scrubber PT-5b as specified by 40CFR63.11647(h).</p> <p>(C)(4) By not operating the Reagent Area Lime Slaker without Wet Scrubber CD-PT-7a on-line and operating properly.</p> <p>(C)(5) By installing, operating and maintaining a pressure drop gauge and liquid flow gauge on each module of Wet Scrubber CD-PT-7a. The pressure drop and liquid flow shall be recorded daily during Slaker operation. Pressure drop readings and liquid flow readings shall be recorded in a log.</p> <p>(C)(6) By making operation and maintenance checks on at least a weekly basis for Wet Scrubber CD-PT-7a. Each check shall be recorded in a log and this log shall include a dated record of all problems, corrective actions and maintenance activities.</p> <p>(C)(7) By establishing an operational range for the pressure drop and liquid flow of the Wet Scrubber CD-PT-7a to provide a reasonable assurance of compliance. The operational ranges shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. Each operational range, with supporting documentation and quality assurance procedures, shall also be submitted to the Bureau of Air Quality, Engineering Services Division for approval within 180 calendar days of source start up and may be updated using this procedure, following Bureau approval.</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.6	<p>Equipment/Control Device ID: PT-8, PT-9, PT-15, PT-17</p> <p>(A) Each diesel engine is subject is subject to New Source Performance Standards (NSPS), 40CFR60 Subpart A, General Conditions and Subpart IIII (NSPS for Stationary Compression Ignition Internal Combustion Engines), and S.C. Regulation 61-62.60 Subparts A and IIII (NSPS for Stationary Compression Ignition Internal Combustion Engines), as applicable. These sources shall comply with all applicable requirements of Subparts A and IIII.</p> <p>(B) Compliance shall be demonstrated by:</p> <p>(B)(1) (40CFR60.4211(c)) By purchasing an engine certified to the applicable emission standards for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.</p> <p>(B)(2) (40CFR60.4211(a)(1)) By operating and maintaining the stationary CI internal combustion engine according to the manufacturer's emission-related written instructions.</p> <p>(B)(3) (40CFR60.4211(a)(2)) By changing only those emission-related settings that are permitted by the manufacturer.</p> <p>(B)(4) (40CFR60.4211(a)(3)) By meeting the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.</p> <p>(B)(5) (40CFR60.4206) By operating and maintaining the stationary CI ICE so that it achieves the emission standards over the entire life of the engine.</p> <p>(B)(6) (40CFR60.4207(b)) By purchasing diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.</p>
D.7	<p>Equipment/Control Device ID: PT-1, PT-2, PT-3, PT-4, CD-WS</p> <p>(A) (S.C. Regulation 61-62.5, Standard No.4, Section IX) Where construction or modification began after December 31, 1985, emissions from the Primary Crusher (PT-1) and each Conveyor Transfer Point (PT-2, PT-3, (PT-4) (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p>(B)(40CFR60.382(b)) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the owner/operator shall not cause to be discharged into the atmosphere from the Primary Crusher (PT-1) and each Conveyor Transfer Point (PT-2, PT-3, (PT-4) any process fugitive emissions that exhibit greater than 10% opacity.</p> <p>(C) Compliance with the opacity limits in (A) and (B) shall be demonstrated as follows:</p> <p>(C)(1) (40CFR60.8 and 40CFR60.385(a)) By conducting a one time performance test for opacity from the Primary Crusher and each conveyor transfer point (PT-2, PT-3 and PT-4) within 60 days after achieving the maximum production rate at which each will be operated, but not later than 180 days after initial startup. The performance test shall be conducted according to the requirements of 40CFR60.386 and S.C. Regulation 61-62.1 Section IV.</p> <p>(C)(2) By maintaining the wet suppression system in proper operational condition at all times and operating the system during the operation of the Primary Crusher and conveyors except when the material is adequately wet.</p> <p>(C)(3) By performing daily visual emission checks on the Primary Crusher and conveyors when in operation. If the crusher is not scheduled to operate during a day, then the checks do not have to be performed. Each check shall be recorded in a log and this log shall include a dated record of all problems, corrective actions and maintenance activities.</p> <p>(C)(4) By performing weekly inspections of all wet suppression system related equipment. Each inspection shall be recorded in a log and this log shall include a dated record of all problems, corrective actions and maintenance activities.</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions										
D.8	<p>Equipment/Control Device ID: CD-WS, CD-PT-5a, CD-PT-5b, CD-PT-7, CD-PT-7a, CD-PT-10</p> <p>(A) (S.C. Regulation 61-62.5, Standard No.4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:</p> <p>For process weights equal to or less than 30 tph: $E = (F)(4.10)(P^{0.67})$ For process weight rates greater than 30 tph: $E = (F)((55.0)(P^{0.11}) - 40)$</p> <p>Where E = the allowable emission rate in pounds per hour P = process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No.4</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <table border="1" data-bbox="518 793 1253 1096"> <thead> <tr> <th>Process</th> <th>Max Process Weight Rate (tph)</th> </tr> </thead> <tbody> <tr> <td>Gold Ore Crushing</td> <td>1,000</td> </tr> <tr> <td>Gold Ore Processing (extraction)</td> <td>380</td> </tr> <tr> <td>Lime Silo Loading No.1</td> <td>30</td> </tr> <tr> <td>Lime Silo Loading No.2</td> <td>30</td> </tr> </tbody> </table> <p>(B) Compliance with the emission limits in (A) shall be demonstrated by operating and monitoring the Wet Suppression System, Wet Scrubber PT-5a, Wet Scrubber PT-5b, Reagent Area Lime Silo Bin Vent Baghouse, Reagent Area Lime Slaker Wet Scrubber and Overburden Lime Silo Bin Vent Filter as specified in this permit.</p>	Process	Max Process Weight Rate (tph)	Gold Ore Crushing	1,000	Gold Ore Processing (extraction)	380	Lime Silo Loading No.1	30	Lime Silo Loading No.2	30
Process	Max Process Weight Rate (tph)										
Gold Ore Crushing	1,000										
Gold Ore Processing (extraction)	380										
Lime Silo Loading No.1	30										
Lime Silo Loading No.2	30										
D.9	<p>Equipment/Control Device ID: PT-16</p> <p>(A) (S.C. Regulation 61-62.5, Standard No. 5.2, Section III) The owner/operator shall apply NO_x controls capable of achieving a 30% reduction from uncontrolled levels to the Thermal Fluid Heater.</p> <p>(B) Compliance with (A) shall be demonstrated as follows:</p> <p>(B)(1) (S.C. Regulation 61-62.5, Standard No.5.2 Section III(a) Table 1) By installing low NO_x burners or equivalent technology on the Thermal Fluid Heater.</p> <p>(B)(2) (S.C. Regulation 61-62.5, Standard No. 5.2, Section VI) By developing a tune-up plan and performing tune-ups every two years in accordance with manufacturer’s specifications or with good engineering practices from start-up of operation. All tune-up records are required to be maintained on site.</p> <p>(B)(3) By submitting certification that the Thermal Fluid Heater meets the requirement specified in (A).</p>										

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.10	<p>Equipment/Control Device ID: PT-16</p> <p>(A) The Thermal Fluid Heater is subject to the following emission limitations:</p> <p>(A)(1) (S.C. Regulation 61-62.5, Standard No.1, Section I) This source shall not discharge into the ambient air smoke which exceeds an opacity of 20%. This opacity standard set forth applies at all times.</p> <p>(A)(2) (S.C. Regulation 61-62.5, Standard No.1, Section II) The allowable discharge of particulate matter resulting from this source is 0.6 pounds per million Btu input.</p> <p>(A)(3) (S.C. Regulation 61-62.5, Standard No.1, Section III) The maximum allowable discharge of sulfur dioxide (SO₂) resulting from this source is 3.5 pounds per million Btu input.</p> <p>(B) (S.C. Regulation 61-62.5, Standard No.1, Section I(C)) Compliance with the emission limits in (A) shall be demonstrated to the extent practicable, by maintaining and operating the heater in a manner consistent with good air pollution control practices for minimizing emissions.</p>
D.11	<p>Equipment/Control Device ID: Non-Enclosed Operations and Fugitive Dust</p> <p>(A) (S.C. Regulation 61-62.5 Standard 4 Section X(A)) All non-enclosed operations shall be conducted in such a manner that a minimum of particulate matter becomes airborne. In no case shall established ambient air quality standards be exceeded at or beyond the property line.</p> <p>(B) Compliance with the requirement in (A) above shall be demonstrated by developing a facility-wide fugitive dust control plan for controlling fugitive emissions from process operations, truck traffic and anywhere else fugitive dust emissions can be generated. The plan shall be developed within 180 days from the issue date of this permit, kept on-site and made available to Department personnel upon request. The plan shall contain at a minimum the following requirements:</p> <p>(B)(1) (S.C. Regulation 61-62.5 Standard No.4 Section X(B) and S.C. Regulation 61-62.6 Section III(d)) The owner/operator shall maintain dust control of the premises and any roadway it owns or controls by paving, or other suitable measures. Oil treatment is prohibited and volatile organic compounds shall not be used for dust control purposes.</p> <p>(B)(2) If dust suppressant aids are used then they shall be applied according to the manufacturer specifications for quantity and frequency.</p> <p>(B)(3) (S.C. Regulation 61-62.6 Section III(c)) Any method of materials handling which will generate fugitive particulate matter that is not fully described in the permit application shall not be used.</p> <p>(B)(4) Spillage and residual materials that have the potential for creating emissions problems shall be removed at an appropriate frequency to minimize levels of fugitive dust emissions.</p> <p>(B)(5) Written guidelines shall be developed for operators on how to handle opacity problems.</p> <p>(B)(6) Haul road speed limits shall be imposed where necessary.</p> <p>(B)(7) Sprinklers (i.e. along roads etc.) shall be kept in proper operational condition.</p>
D.12	<p>Within 60 days of achieving normal operations, the owner/operator shall test the tailings to confirm the concentration of HCN. The results of this test shall be submitted to the Bureau of Air Quality, Engineering Services Division .</p>

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E. OPERATIONAL FLEXIBILITY

Condition Number	Conditions
N/A	N/A

F. MODELING REQUIREMENTS

Condition Number	Condition
F.1	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Modeled Emission Rates of this permit. Higher emission rates may be administratively incorporated into Attachment - Modeled Emission Rates of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Modeled Emission Rates, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment - Modeled Emission Rates, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.</p>

G. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ	N/A	N/A	N/A
63	EEEEEEE	Semi-Annual	January 1 through June 30 July 1 through December 31	January 31 st July 31 st
63	CCCCCC	N/A	N/A	N/A

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with §63.10.a.5. This request may be made 1 year after the compliance date for the associated MACT standard.

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H. NESHAP - CONDITIONS

Condition Number	Condition						
H.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.						
H.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address: US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303						
H.3	Equipment/Control Device ID: PT-17, PT-8, PT-9, PT-15 (40CFR63.6590(c)) Each engine of the Diesel Engine Powered Emergency Diesel Generator (IA-PT-8), Fire Water Pump Engine (IA-PT-17), Trailer Mounted Lighting Systems (PT-9) and Sump Pumps (PT-15) must meet the requirements of 40CFR63 Subpart ZZZZ by meeting the requirements of 40CFR60 Subpart IIII for compression ignition engines. No further requirements apply for each engine under 40CFR63 Subpart ZZZZ.						
H.4	<p>This facility's Carbon Process without Mercury Retorts that includes carbon kilns, preg tanks, electrowinning cells, and melt furnaces, but has no retorts (New Affected Source) is subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A (General Provisions) and Subpart EEEEEEE (National Emission Standards For Hazardous Air Pollutants: Gold Mine Ore Processing And Production Area Source Category). This new affected source shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.</p> <p>(A) The Carbon Process without Mercury Retorts is subject to the following limitation:</p> <table border="1" data-bbox="521 1077 1253 1199"> <thead> <tr> <th data-bbox="521 1077 667 1136">Pollutant</th> <th data-bbox="667 1077 979 1136">Limit</th> <th data-bbox="979 1077 1253 1136">Basis</th> </tr> </thead> <tbody> <tr> <td data-bbox="521 1136 667 1199">Hg</td> <td data-bbox="667 1136 979 1199">0.14 lb/ton of concentrate processed</td> <td data-bbox="979 1136 1253 1199">40CFR63.11645(g) 40CFR63.11645(i)</td> </tr> </tbody> </table> <p>(B) Compliance with the emission limit in (A) shall be demonstrated by:</p> <p>(B)(1) (40CFR63.11641(c)) By being in compliance with the applicable provisions of 40CFR63 Subpart EEEEEEE upon startup.</p> <p>(B)(2) (40CFR63.11646(a)) By conducting a mercury compliance emission test within 180 days of startup for all process units according to the requirements in 40CFR63.11646(a)(1) through 40CFR63.11646(a)(13). This compliance testing must be repeated annually thereafter, with no two consecutive annual compliance tests occurring less than 3 months apart or more than 15 months apart. Additional compliance tests may be conducted as specified by 40CFR63.11647(i).</p> <p>(B)(3) By operating and maintaining the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</p> <p>(B)(4) (40CFR63.11647(h)) By establishing a minimum value as the operating limit for water flow rate (or line pressure) and pressure drop of Wet Scrubber PT-5a and Wet Scrubber PT-5b either during the performance test required in 40CFR63.11646(a), according to the manufacturer's specifications, or as approved by the permitting authority. If the owner/operator chooses to establish the operating limit based on the results of the performance test, the new operating limit must be established based on either the lowest value during any test run or 10 percent less than the average value measured during the test.</p>	Pollutant	Limit	Basis	Hg	0.14 lb/ton of concentrate processed	40CFR63.11645(g) 40CFR63.11645(i)
Pollutant	Limit	Basis					
Hg	0.14 lb/ton of concentrate processed	40CFR63.11645(g) 40CFR63.11645(i)					

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H. NESHAP - CONDITIONS

Condition Number	Condition
H.4	<p>(B)(5) (40CFR63.11647(h)) By monitoring the water flow rate and pressure drop of the wet scrubber once per shift and taking corrective action within 24 hours if any daily average is less than the operating limit. If the parameters are not in range within 72 hours, the owner/operator must report the deviation to the permitting authority and perform a compliance test for the process unit(s) controlled with the wet scrubber that has the parameter exceedance within 40 days to determine if the affected source is in compliance with the MACT limit. For the other process units included in the affected source, the owner/ operator can use the results of the previous compliance test to determine the emissions for those process units to be used in the calculations of the emissions for the affected source.</p> <p>(B)(6) By submitting an Initial Notification of Compliance Status as required by 40CFR63.11648(b) and 40CFR63.9.</p> <p>(B)(7) By submitting a Deviation Report as required by 40CFR63.11648(c) if a deviation occurs during a semiannual reporting period. As specified by 40CFR63.11648(d), if a malfunction occurs during the reporting period, the deviation report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the owner/operator during a malfunction of an affected source to minimize emissions in accordance with 40CFR63.11646(b), including actions taken to correct a malfunction.</p> <p>(B)(8) (40CFR63.11648(e)(1)) As required in 40CFR63.10(b)(2)(xiv), by keeping a copy of each notification that is submitted to comply with 40CFR63 Subpart EEEEEEE and all documentation supporting any Initial Notification, Notification of Compliance Status, and semiannual compliance certifications that are submitted.</p> <p>(B)(9) (40CFR63.11648(e)(2)) By keeping records of all performance tests, measurements, monitoring data, and corrective actions required by 40CFR63.11646 and 40CFR63.11647</p> <p>(B)(10) (40CFR63.11648(e)(2)) By keeping records of the following information for each corrective action required by 40CFR63.11647:</p> <p>(B)(10)(a) (40CFR63.11648(e)(2)(i)) The date, place, and time of the monitoring event requiring corrective action.</p> <p>(B)(10)(b) (40CFR63.11648(e)(2)(ii)) Technique or method used for monitoring.</p> <p>(B)(10)(c) (40CFR63.11648(e)(2)(iv)) Operating conditions during the activity.</p> <p>(B)(10)(d) (40CFR63.11648(e)(2)(v)) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.</p> <p>(B)(10)(e) (40CFR63.11648(e)(2)(vi)) Maintenance or corrective action taken (if applicable).</p> <p>(B)(11) (40CFR63.11648(e)(3)) By keeping records of the operating hours for each process as required by 40CFR63.11648(a)(5) and records of the monthly quantity of ore and concentrate processed or produced as required by 40CFR63.11646(a)(10).</p> <p>(B)(12) (40CFR63.11648(f)) By keeping records in a form suitable and readily available for expeditious review, according to 40CFR63.10(b)(1). As specified in 40CFR63.10(b)(1), each record must be kept for 5 years following the date of each recorded action. Each record must be kept onsite for at least 2 years after the date of each recorded action according to 40CFR63.10(b)(1). The records may be kept offsite for the remaining 3 years.</p>

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H. NESHAP - CONDITIONS

Condition Number	Condition
H.4	(B)(13) (40CFR63.11648(g)) Within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner/operator of the affected facility must submit the test data to EPA by entering the data electronically into EPA's WebFIRE data base through EPA's Central Data Exchange. The owner/operator of an affected facility shall enter the test data into EPA's data base using the Electronic Reporting Tool or other compatible electronic spreadsheet. Only performance evaluation data collected using methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.
H.5	<p>Equipment/Control Device ID: TK-003</p> <p>This facility's Gasoline Storage Tank is subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart A (General Provisions) and 40CFR63 Subpart CCCCCC (National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Dispensing Facilities). This new affected source shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.</p> <p>(40CFR63.11116(a)) The owner/operator must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:</p> <ul style="list-style-type: none"> (a) Minimize gasoline spills (b) Clean up spills as expeditiously as practicable (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. <p>(40CFR63.11116(b)) The owner/operator is not required to submit notifications or reports as specified in 40CFR63.11125, 40CFR63.11126 or 40CFR63 Subpart A, but must have records available within 24 hours of a request by the Department to document gasoline throughput.</p>

I. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the startup date of the source.)	Report Due Date
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30
Annual	January-December April-March July-June October-September	January 30 April 30 July 30 October 30

Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.

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J. REPORTING CONDITIONS

Condition Number	Condition
J.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
J.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: <p style="text-align: center;">2600 Bull Street Columbia, SC 29201</p> The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov/environment/envserv/regions.htm .
J.3	The owner/operator shall submit written notification to the Director of Engineering Services of the date construction is commenced, postmarked no later than 30 days after such date.
J.4	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.
J.5	(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Quality Control Regional office within 24 hours after the beginning of the occurrence. The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include as a minimum, the following: <ol style="list-style-type: none"> 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

K. PERMIT EXPIRATION AND EXTENSION

Condition Number	Condition
K.1	(S.C. Regulation 61-62.1, Section II.A.4) Approval to construct shall become invalid if construction: <ol style="list-style-type: none"> a. is not commenced within 18 months after receipt of such approval; b. is discontinued for a period of 18 months or more; or c. is not completed within a reasonable time as deemed by the Department. The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
K.2.	This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

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L. PERMIT TO OPERATE

Condition Number	Condition
L.1	(S.C. Regulation 61-62.1 Section II.F.2) The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department.
L.2	If construction is certified as provided in S.C. Regulation 61-62.1 Section II.F.2, the owner, operator, or representative may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department.
L.3	If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.
L.4	(S.C. Regulation 61-62.1, Section II.F.3) For sources not yet covered by an effective Title V operating permit, the owner/operator shall submit a written request to the Director of the Engineering Services for a new Title V operating permit to cover any new, or altered source, postmarked no later than 15 days after the actual date of initial startup of each new or altered source. (S.C. Regulation 61-62.70.5.a) The owner/operator shall submit a timely and complete Part 70 permit application within 12 months of startup.

M. EMISSIONS INVENTORY REPORTS

Condition Number	Condition
M.1	All newly permitted and constructed Title V sources and/or Non-attainment Area Sources shall complete and submit an emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These Emissions Inventory Reports shall be submitted to the Manager of the Emissions Inventory Section, Bureau of Air Quality. This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.

N. GENERAL CONDITIONS

Condition Number	Condition
N.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.

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N. GENERAL CONDITIONS

Condition Number	Condition
N.2	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner/operator shall demonstrate the affirmative defense of an emergency through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none"> 1. An emergency occurred, and the owner/operator can identify the cause(s) of the emergency; 2. The permitted source was at the time the emergency occurred being properly operated; 3. During the period of the emergency, the owner/operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner/operator gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include as a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. <p>In any enforcement action, the owner/operator seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency, or upset provision contained in any applicable requirement.</p>
N.3	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner/operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> 1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

ATTACHMENT - MODELED EMISSION RATES

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The emission rates listed herein are not considered enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Modeling Requirements).

STANDARD NO.2 - MODELED AAQS EMISSION RATES (lb/hr)							
STACK ID	PM ₁₀ Annual	PM ₁₀ 24Hour	PM _{2.5} Annual	PM _{2.5} 24 Hour	SO ₂	NO _x	CO
PT1	0.975	2.565	0.148	0.388	--	--	--
PT2	0.144	0.380	0.022	0.058	--	--	--
PT3	0.073	0.192	0.011	0.029	--	--	--
PT4	0.144	0.144	0.022	0.022	--	--	--
PT15A	0.059	0.059	0.059	0.059	0.771	2.208	0.266
PT15B	0.059	0.059	0.059	0.059	0.771	2.208	0.266
PT15C	0.059	0.059	0.059	0.059	0.771	2.208	0.266
PT15D	0.059	0.059	0.059	0.059	0.771	2.208	0.266
PT15E	0.059	0.059	0.059	0.059	0.771	2.208	0.266
PT16	0.095	0.095	0.095	0.095	7.50E-03	1.250	1.050

ATTACHMENT - MODELED EMISSION RATES

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STANDARD NO.7 - MODELED PSD CLASS II INCREMENT EMISSION RATES (lb/hr)				
STACK ID	Minor Source Baseline Dates			
	12/1/1981	12/1/1981	12/1/1981	N/A
	PM₁₀ Annual	PM₁₀ 24Hour	SO₂	NO_x
PT1	0.975	2.565	--	--
PT2	0.144	0.380	--	--
PT3	0.073	0.192	--	--
PT4	0.144	0.144	--	--
PT15A	0.059	0.059	0.771	--
PT15B	0.059	0.059	0.771	--
PT15C	0.059	0.059	0.771	--
PT15D	0.059	0.059	0.771	--
PT15E	0.059	0.059	0.771	--
PT16	0.095	0.095	7.50E-03	--