Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

Bureau of Air Pollution Control

901 SOUTH STEWART STREET SUITE 4001
CARSON CITY, NEVADA 89701-5249
p: 775-687-9349 • www.ndep.nv.gov/bapc

Facility ID No. A2214 *Permit No.* AP1041-4681

CLASS I AIR QUALITY OPERATING PERMIT (*40 CFR Part 70 Program)*

Issued to: SOLIDUS RESOURCES, LLC - SPRING VALLEY MINE PROJECT (HEREINAFTER REFERRED TO AS PERMITTEE)
Mailing Address: 2000 VASSAR STREET, PO BOX 11340, RENO, NV 89510
Driving Directions: FROM LOVELOCK TAKE I-80 E FOR APPROXIMATELY 12.6 MILES. TAKE EXIT 119 TOWARD NV-858 E. CONTINUE ONTO LOVELOCK-UNIONVILLE ROAD AND DRIVE FOR APPROXIMATELY 14 MILES.

General Facility Location:

SECTIONS 24 THROUGH 28 AND 33 THROUGH 36, T 29 N, R 34 E, MDB&M
SECTIONS 19 THROUGH 21 AND 28 THROUGH 32, T 29 N, R 35 E, MDB&M
SECTIONS 1 THROUGH 4, T 28 N, R 34 E, MDB&M
SECTIONS 4 THROUGH 6, T 28 N, R 35 E, MDB&M
HA 129 – BUENA VISTA VALLEY / PERSHING COUNTY
HA 73A – LOVELOCK VALLEY/OREANA SUB-AREA / PERSHING COUNTY
NORTH 4,463,762 M, EAST 401,328 M, UTM ZONE 11, NAD 83

Emission Unit List:

A. System 21 – Refinery - Carbon Kiln (Electric)
S2.041 Carbon Kiln (Electric) (MOPTC AP1041-4682, TU4.001)

B. System 22 – Refinery - Electrowinning Circuit
S2.042 Electrowinning Circuit (6 Cells) (MOPTC AP1041-4682, TU4.002)
S2.043 Barren Tank (MOPTC AP1041-4682, TU4.003)
S2.044 Eluant Tank (MOPTC AP1041-4682, TU4.004)

C. System 23 – Refinery - Retort (Electric)
S2.045 Mercury Retort (Electric) (MOPTC AP1041-4682, TU4.005)

D. System 24 – Refinery - Furnace
S2.046 Furnace (Electric) (MOPTC AP1041-4682, TU4.006)

******End of Emission Unit List******

Facility ID No. A2214 *Permit No.* AP1041-4681
CLASS I AIR QUALITY OPERATING PERMIT

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section I. General Conditions

A. Nevada Administrative Code (NAC) 445B.063
The Department may use any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed, to determine excess emissions.

B. NAC 445B.22013
Prohibited Discharge
The Permittee shall not cause or permit the discharge into the atmosphere from any stationary source of any hazardous air pollutant or toxic regulated air pollutant that threatens the health and safety of the general public, as determined by the Director.

C. NAC 445B.22017
Visible Emissions: Maximum Opacity; Determination and Monitoring of Opacity.
1. Except as otherwise provided in this section and NAC 445B.2202, the Permittee may not cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:
   a. If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A of 40 CFR Part 60.
2. The provisions of this section and NAC 445B.2202 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.

D. NAC 445B.22067
Open Burning
The open burning of any combustible refuse, waste, garbage, oil, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in NAC 445B.22067(2).

E. NAC 445B.22087
Odors
1. The Permittee may not discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property.
2. The Director shall investigate an odor when 30 percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy. The sample must be at least 20 people or 75 percent of those exposed if fewer than 20 people are exposed.
3. The Director shall deem the odor to be a violation if he or she is able to make two odor measurements within a period of 1 hour. These measurements must be separated by at least 15 minutes. An odor measurement consists of a detectable odor after the odorous air has been diluted with eight or more volumes of odor-free air.

F. NAC 445B.225
Prohibited Conduct: Concealment of Emissions
The Permittee may not install, construct or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section I. General Conditions (continued)

G. NAC 445B.227

Prohibited conduct: Operation of source without required equipment; removal or modification of required equipment; modification of required procedure

Except as otherwise provided in NAC 445B.001 to 445B.390, inclusive, no person may:

1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of this Operating Permit is installed and operating.
2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of the permit.

H. NAC 445B.232

Excess Emissions

1. Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.100 to 445B.390, inclusive, must be approved in advance by the Director and performed during a time designated by the Director as being favorable for atmospheric ventilation.
2. The Permittee shall notify the Director of the proposed time and expected duration at least 30 days before any scheduled maintenance or testing which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled maintenance or testing must not be conducted unless the scheduled maintenance or testing is approved pursuant to NAC 445B.232(1).
3. The Permittee shall notify the Director of the proposed time and expected duration at least 24 hours before any scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled repairs must not be conducted unless the scheduled repairs are approved pursuant to NAC 445B.232(1).
4. The Permittee shall notify the Director by email of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment for controlling pollution or during start-up or shutdown of that equipment. The Permittee shall send the email to aircompliance@ndep.nv.gov.
5. The Permittee shall provide the Director, within 15 days after any malfunction, upset, start-up, shutdown or human error which results in excess emissions, sufficient information to enable the Director to determine the seriousness of the excess emissions. The information must include at least the following:
   a. The identity of the stack or other point of emission, or both, where the excess emissions occurred.
   b. The estimated magnitude of the excess emissions expressed in opacity or in the units of the applicable limitation on emission and the operating data and methods used in estimating the magnitude of the excess emissions.
   c. The time and duration of the excess emissions.
   d. The identity of the equipment causing the excess emissions.
   e. If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunction.
   f. The steps taken to limit the excess emissions.
   g. Documentation that the equipment for controlling air pollution, process equipment or processes were at all times maintained and operated, to a maximum extent practicable, in a manner consistent with good practice for minimizing emissions.
6. The Permittee shall ensure that any notification or related information submitted to the Director pursuant to this section is provided in a format specified by the Director.

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Section I. General Conditions (continued)

I. NAC 445B.252

Testing and Sampling

1. To determine compliance with NAC 445B.001 to 445B.390, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the Director may either conduct or order the Permittee of any stationary source to conduct or have conducted such testing and sampling as the Director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the Director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial start-up of the facility and at such other times as may be required by the Director.
2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the Director:
   a. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
   b. Approves the use of an equivalent method;[1]
   c. Approves the use of an alternative method, the results of which the Director has determined to be adequate for indicating whether a specific stationary source is in compliance;[2] or
   d. Waives the requirement for tests of performance because the Permittee of a stationary source has demonstrated by other means to the Director's satisfaction that the affected facility is in compliance with the standard.
3. Tests of performance must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard.
4. The Permittee of an affected facility shall give notice to the Director 30 days before the test of performance to allow the Director to have an observer present. A written testing procedure for the test of performance must be submitted to the Director at least 30 days before the test of performance to allow the Director to review the proposed testing procedures.
5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the Director's approval.
6. All testing and sampling will be performed in accordance with recognized methods and as specified by the Director.[3]
7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power and other pertinent allied facilities as may be required and specified in writing by the Director must be provided and paid for by the Permittee of the stationary source.
8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the Director no later than 60 days after the testing or sampling, or both.
9. Notwithstanding the provisions of NAC 445B.252(2), the Director shall not approve an alternative method or equivalent method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:
   a. An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or
   b. An affected source.

[1] Requires additional approval from the EPA Administrator.
[2] Requires additional approval from the EPA Administrator.
[3] Requires additional approval from the EPA Administrator.

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section I. General Conditions (continued)

J. NAC 445B.273(1)
Schedules for Compliance
All new and existing stationary sources must comply with NAC 445B.001 through 445B.390, inclusive. Existing stationary sources are in compliance with those sections and may continue to operate under the provisions of their approved compliance schedules, which may be amended from time to time.

K. NAC 445B.275
Violations: Acts constituting; notice
1. Failure to comply with any requirement of NAC 445B.001 to 445B.390, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to the Permittee for any violation, including, but not limited to:
   a. Failure to apply for and obtain an operating permit;
   b. Failure to construct a stationary source in accordance with the application for an operating permit as approved by the Director;
   c. Failure to construct or operate a stationary source in accordance with any condition of an operating permit;
   d. Commencing construction or modification of a stationary source without applying for and receiving an operating permit or a modification of an operating permit as required by NAC 445B.001 to 445B.3477, inclusive, or a mercury operating permit to construct as required by NAC 445B.3611 to 445B.3689, inclusive;
   e. Failure to comply with any requirement for recordkeeping, monitoring, reporting or compliance certification contained in an operating permit; or
   f. Failure to pay fees as required by NAC 445B.327 or 445B.3689.
2. The written notice must specify the provision of NAC 445B.001 to 445B.390, inclusive, the condition of the operating permit or the applicable requirement that is being violated.
3. Written notice shall be deemed to have been served if delivered to the person to whom addressed or if sent by registered or certified mail to the last known address of the person.

L. NAC 445B.305
Operating permits: Imposition of more stringent standards for emissions
The Director may impose standards for emissions on a proposed stationary source that are more stringent than those found in NAC 445B.001 to 445B.390, inclusive, as a condition of approving an operating permit for the proposed stationary source.

M. NAC 445B.315
Contents of operating permits: Exception for operating permits to construct; required conditions
1. Notwithstanding any provision of this section to the contrary, the provisions of this section do not apply to operating permits to construct.
2. The Director shall cite the legal authority for each condition contained in an operating permit.
3. An operating permit must contain the following conditions:
   a. The term of the operating permit is 5 years.
   b. The Permittee shall retain records of all required monitoring data and supporting information for 5 years after the date of the sample collection, measurement, report or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.
   c. Each of the conditions and requirements of the operating permit is severable, and if any are held invalid, the remaining conditions and requirements continue in effect.
   d. The Permittee shall comply with all conditions of the operating permit. Any noncompliance constitutes a violation and is a ground for:
      (1) An action for noncompliance;
      (2) Revising, revoking, reopening and revising, or terminating the operating permit by the Director; or
      (3) Denial of an application for a renewal of the operating permit by the Director.
   e. The need to halt or reduce activity to maintain compliance with the conditions of the operating permit is not a defense to noncompliance with any condition of the operating permit.

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Section I. General Conditions (continued)

M. NAC 445B.315 (continued)
Contents of operating permits: Exception for operating permits to construct; required conditions (continued)

3. An operating permit must contain the following conditions (continued):
   - f. The Director may revise, revoke and reissue, reopen and revise, or terminate the operating permit for cause.
   - g. The operating permit does not convey any property rights or any exclusive privilege.
   - h. The Permittee shall provide the Director, in writing and within a reasonable time, with any information that the Director requests[4] to determine whether cause exists for revising, revoking and reissuing, reopening and revising, or terminating the operating permit, or to determine compliance with the conditions of the operating permit.
   - i. The Permittee shall pay fees to the Director in accordance with the provisions set forth in NAC 445B.327 and 445B.331.
   - j. The Permittee shall allow the Director or any authorized representative, upon presentation of credentials, to:
     - (1) Enter upon the premises of the Permittee where:
       - (a) The stationary source is located;
       - (b) Activity related to emissions is conducted; or
       - (c) Records are kept pursuant to the conditions of the operating permit;[5]
     - (2) Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of the operating permit[6]
     - (3) Inspect, at reasonable times, any facilities, practices, operations or equipment, including any equipment for monitoring or controlling air pollution, that are regulated or required pursuant to the operating permit; and
     - (4) Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of the operating permit or applicable requirements.
   - k. A responsible official (as defined in NAC 445B.156) of the stationary source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the operating permit are true, accurate and complete.

N. NAC 445B.319, NAC 445B.342, NAC 445B.3425, and NAC 445B.344
Any changes to this operating permit will comply with all provisions established under NAC 445B.319 (Administrative Amendment),[7] NAC 445B.342 (Notification of Authorized Change), NAC 445B.3425 (Minor Revision), and NAC 445B.344 (Significant Revision).

[4] The Permittee shall submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, and emissions. These reports will be submitted in the format required by the Nevada Division of Environmental Protection Bureau of Air Pollution Control and Bureau of Air Quality Planning (Air Programs) for all emission units/systems specified on the form. The report must be submitted to the Air Programs no later than March 1 annually for the preceding calendar year, unless otherwise approved by the Air Programs.
[5] Under NAC 445B.288(3), the Permittee shall retain an operating log for emission units considered insignificant activities subject to a limitation on its hours of operation pursuant to NAC 445B.288(2) for not less than 5 years.
[6] The Permittee shall provide a digital spreadsheet or specified format required by the Nevada Division of Environmental Protection Bureau of Air Pollution Control.
[7] Under NAC 445B.287(3), an operating permit may not be transferred from one owner or piece of equipment to another. The Permittee may apply for an administrative amendment reflecting a change of ownership or the name of the stationary source.

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Section I. General Conditions (continued)

O. NAC 445B.325

Termination, reopening and revision, modification, and revocation and reissuance

1. A Class I operating permit must be reopened and revised to incorporate any additional applicable requirement adopted pursuant to the Act if, on the effective date of the applicable requirement, the operating permit has a remaining term of 3 or more years. The reopening must be completed no later than 18 months after the effective date of the applicable requirement.[8]
2. An operating permit may be terminated, reopened and revised, modified, or revoked and reissued if:
   a. The Director or the Administrator determines that the operating permit contains a material mistake or is based on inaccurate statements;
   b. The Director or the Administrator determines that the operating permit, as written, does not ensure compliance with all applicable requirements; or
   c. The Director determines that there has been a violation of any of the provisions of NAC 445B.001 to 445B.390, inclusive, any applicable requirement, or any condition contained in the operating permit
3. The Director shall notify the Permittee at least 30 days before the Director terminates, reopens and revises, revises, or revokes and reissues the operating permit. The notice must be made by certified mail and must contain the legal authority, the jurisdiction and the reasons for the action taken.[9]
4. If the Administrator notifies the Director and the Permittee that cause exists to reopen the operating permit, the Director shall forward to the Administrator a proposed determination of the reopening and revision, the revision of, or the revocation and reissuance of the operating permit within 90 days after receipt of the notice from the Administrator.[10]
5. If the Director reopens an operating permit, he or she shall revise only those portions of the operating permit for which cause exists.
6. The reopening of an operating permit pursuant to this section must comply with all of the relevant requirements for the issuance or revision of a permit, including the requirements related to the content of the permit and the requirements for notice, public participation and comment, and a review by any affected states.

P. NAC 445B.3265

Operating permits: Revocation and reissuance

1. An operating permit may be revoked if the control equipment is not operating.
2. An operating permit may be revoked by the Director upon determining that there has been a violation of NAC 445B.001 to 445B.390, inclusive, or the provisions of 40 CFR 52.21, or 40 CFR Part 60 or 61, Prevention of Significant Deterioration, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants, adopted by reference in NAC 445B.221.
3. The revocation is effective 10 days after the service of a written notice, unless a hearing is requested.

[8] State only requirements (only Nevada has authority to enforce).
[9] State only requirements (only Nevada has authority to enforce).
[10] State only requirements (only Nevada has authority to enforce).

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section I. General Conditions (continued)

P. NAC 445B.3265 (continued)
Operating permits: Revocation and reissuance (continued)

4. To reissue a revoked operating permit, the holder of the revoked permit must file a new application with the Director, accompanied by the fee for an initial operating permit as specified in NAC 445B.327. An environmental review of the stationary source must be conducted as though construction had not yet commenced.

Q. NAC 445B.3405(1)(d)
The Permittee shall record:

1. Monitoring information required by the conditions of this permit including the date, the location and the time of the sampling or the measurements and the operating conditions at the time of the sampling or measurements; and
2. The date on which the analyses were performed, the company that performed them, the analytical techniques that the company used, and the results of such analyses.

R. NAC 445B.3405(1)(e)
The Permittee shall:

1. Promptly report to the Director all deviations from the requirements of this operating permit; and
2. Report to the Director the probable cause of all deviations and any action taken to correct the deviations. For this operating permit, prompt is defined as submittal of a report within 15 days of the deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232, or for reporting of an emergency (as defined by NAC 445B.326); and
3. Submit reports of any required monitoring every 6 months, within 8 weeks after June 30 and December 31 of each calendar year. The reports must contain a summary of the data collected as required by all monitoring, recordkeeping and compliance requirements and as specified in this operating permit.

S. NAC 445B.3405(1)(j)
The Permittee shall submit a compliance certification annually,[11] or more frequently if required by an applicable requirement, to the Director. A copy of the compliance certification must be submitted to the Administrator. A compliance certification must include:

1. An identification of each term or condition of the operating permit that is the basis of the certification;
2. The status of the stationary source's compliance with any applicable requirement;
3. A statement of whether compliance was continuous or intermittent;
4. The method used for determining compliance; and
5. Any other facts the Director determines to be necessary to determine compliance.

T. NAC 445B.3443
Renewal of permit

1. All Class I operating permits must be renewed 5 years after the date of issuance.
2. A complete application for the renewal of a Class I operating permit must be submitted to the Director on the form provided by the Director with the appropriate fee at least 240 days, but not earlier than 18 months, before the expiration date of the current Class I operating permit for stationary sources.[12]
3. Applications for the renewal of a Class I operating permit must comply with all requirements for the issuance of an initial Class I operating permit as specified in NAC 445B.3395.
4. If an application for the renewal of a Class I operating permit is submitted in accordance with NAC 445B.3443(2), the stationary source may continue to operate under the conditions of the existing Class I operating permit until the Class I operating permit is renewed or the application for renewal is denied.

[11] The Permittee shall submit the compliance certification on or before March 1.
[12] The Director shall determine whether the application is complete within 60 days of receipt of the application (NAC 445B.3395). It is recommended the Permittee submit the application at least 300 days before the expiration date of the current Class I operating permit.

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section I. General Conditions (continued)

T. NAC 445B.3443 (continued)
Renewal of permit (continued)
5. If an application for the renewal of a Class I operating permit is not submitted in accordance with NAC 445B.3443(2):
   a. The stationary source may be required to cease operation when the Class I operating permit expires; and
   b. The Permittee of the stationary source:
      (1) Must apply for the issuance of a new Class I operating permit pursuant to NAC 445B.3375; and
      (2) May not recommence the operation until the new Class I operating permit is issued.
6. The fee for the issuance of a new Class I operating permit or the renewal of a Class I operating permit is specified in NAC 445B.327.

U. Nevada Revised Statute (NRS) 445B.470
Prohibited acts; penalty; establishment of violation; request for prosecution
1. A person shall not knowingly:
   a. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information;
   b. Fail to pay any fee;
   c. Falsify any material statement, representation or certification in any notice or report; or
   d. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.
2. Any person who violates any provision of NRS 445B.470(1) shall be punished by a fine of not more than $10,000 for each day of the violation.
3. The burden of proof and degree of knowledge required to establish a violation of subsection 1 are the same as those required by 42 U.S.C. § 7413(c), as that section existed on October 1, 1993.
4. If, in the judgment of the Director of the Department or the Director's designee, any person is engaged in any act or practice which constitutes a criminal offense pursuant to NRS 445B.100 to 445B.640, inclusive, the Director of the Department or the designee may request that the Attorney General or the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.
5. If, in the judgment of the control officer of a local air pollution control board, any person is engaged in such an act or practice, the control officer may request that the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.

V. ASIP NAC Article 2.5.4
Breakdown or upset, determined by the Director to be unavoidable and not the result of careless or marginal operations, shall not be considered a violation of these regulations.

******End of General Conditions******

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section II. Construction Conditions

A. Notification (NAC 445B.250; NAC 445B.3405)

The Permittee shall notify the Director in writing of the following for **S2.041 through S2.046 –** added on Month XX, 2025.

1. The date construction (or reconstruction as defined under NAC 445B.247) of the affected facility is commenced, postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
2. The anticipated date of initial startup of an affected facility, postmarked no more than 60 days and no less than 30 days prior to such date.
3. The actual date of initial startup of the affected facility, postmarked within 15 days after such date.
4. The date upon which demonstration of the continuous monitoring system performance commences in accordance with NAC 445B.256 to 445B.267, inclusive. Notification must be postmarked not less than 30 days before such date.

B. Initial Opacity Compliance Demonstration and Initial Performance Tests

1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below:

Table II-1: Initial Opacity Compliance Demonstration

System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures
System 21 – Refinery – Carbon Kiln (Electric)	S2.041	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 22 – Refinery – Electrowinning Circuit	S2.042 through S2.044		
System 23 – Refinery – Retort (Electric)	S2.045		
System 24 – Refinery – Furnace	S2.046		

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section II. Construction Conditions (continued)

B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)

Table II-2: Initial Performance Demonstration

System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures
System 21 – Refinery – Carbon Kiln (Electric)	S2.041	PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
		$PM_{10}/PM_{2.5}$	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
System 24 – Refinery – Furnace	S2.046	PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
		$PM_{10}/PM_{2.5}$	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.

2. All initial opacity compliance demonstrations and initial performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All initial performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
3. Testing shall be conducted on the exhaust stack (post controls).
4. Initial opacity compliance demonstrations and initial performance tests in **Table II-1 and Table II-2** above, must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the initial opacity compliance demonstrations and initial performance tests. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of the initial opacity compliance demonstrations and initial performance tests unless otherwise specified in the applicable standard. (NAC 445B.252(3))

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Section II. Construction Conditions (continued)

B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)

5. The Permittee shall give notice to the Director 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to have an observer present. A written testing procedure must be submitted to the Director at least 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to review the proposed testing procedures. (NAC 445B.252(4) and 40 CFR Part 60.7(a)(6))
6. Within 60 days after completing the initial opacity compliance demonstrations and initial performance tests contained in **Table II-1 and Table II-2** of this section, the Permittee shall furnish the Director a written report of the results. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689, inclusive. (NAC 445B.252(8))
7. Initial opacity compliance demonstrations and initial performance tests required under this section that are conducted below the maximum allowable throughput, shall be subject to the Director's review to determine if the throughputs during initial opacity compliance demonstrations and initial performance tests sufficient to provide adequate compliance demonstration. Should the Director determine that the initial opacity compliance demonstrations and initial performance tests do not provide adequate compliance demonstration, the Director may require additional testing.

******End of Construction Conditions******

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Section III. Ambient Air Monitoring Requirements

A. Not Applicable.

******End of Ambient Air Monitoring Requirements******

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Section IV. Specific Operating Conditions

A. Emission Unit S2.041

System 21 – Refinery - Carbon Kiln (Electric)		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.041	Carbon Kiln (Electric) (MOPTC AP1041-4682, TU4.001)	4,467,538	409,088

1. Air Pollution Control Equipment (NAC 445B.3405)
   a. Emissions from **S2.041** shall be controlled by a **knockout box,** a **condenser,** and a **carbon bed** in series.
   b. Descriptive Stack Parameters
      Stack Height: 25.0 feet
      Stack Diameter: 0.50 feet
      Stack Temperature: 100 °F
      Exhaust Flow: 400.0 dry standard cubic feet per minute (dscfm)

2. Operating Parameters (NAC 445B.3405)
   a. The maximum allowable throughput rate for **S2.041** shall not exceed **0.50** tons per hour of **process carbon,** averaged over a calendar day.
   b. Hours
      (1) **S2.041** may operate a total of **24** hours per day.

3. Emission Limits (NAC 445B.305, NAC 445B.3405)
   The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the final exhaust stack of **S2.041** the following pollutants in excess of the following specified limits:
   a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   b. The discharge of **PM_{10}** (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   c. The discharge of **$PM_{2.5}$** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   d. NAC 445B.22017 – The opacity from the final exhaust stack of **S2.041** shall not equal or exceed **20** percent.
   e. NAC 445B.22033 – The maximum allowable discharge of **PM_{10}** to the atmosphere from **S2.041** shall not exceed **2.58** pounds per hour.

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)
   The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
   a. Monitor and record the throughput for **S2.041** for each calendar day.
   b. Record the corresponding average throughput rate in tons per hour. The average throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
   c. Monitor and record the hours of operation for **S2.041** for each calendar day.

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Section IV. Specific Operating Conditions (continued)

A. Emission Unit S2.041 (continued)

5. Performance and Compliance Testing (NAC 445B.3405, (NAC 445B.252(1))
The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:
   a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
   b. Testing shall be conducted on the exhaust stack (post controls).
   c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
   d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
   e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
   f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. Federal Requirements
National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart EEEEEEE – Gold Mine Ore Processing and Production
The Permittee, upon issuance of this operating permit, shall comply with the requirements of 40 CFR Part 63 Subpart EEEEEEE, as set forth in **Section V** of this operating permit.

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Section IV. Specific Operating Conditions (continued)

B. Emission Units S2.042 through S2.044

System 22 – Refinery - Electrowinning Circuit		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.042	Electrowinning Circuit (6 Cells) (MOPTC AP1041-4682, TU4.002)	4,467,521	409,082
S2.043	Barren Tank (MOPTC AP1041-4682, TU4.003)	4,467,521	409,082
S2.044	Eluant Tank (MOPTC AP1041-4682, TU4.004)	4,467,521	409,082

1. Air Pollution Control Equipment (NAC 445B.3405)
   a. Emissions from **S2.042 through S2.044** shall be controlled by a **carbon bed**.
   b. Descriptive Stack Parameters
      Stack Height: 25.0 feet
      Stack Diameter: 1.25 feet
      Stack Temperature: 146 °F
      Exhaust Flow: 4,000.0 dry standard cubic feet per minute (dscfm)

2. Operating Parameters (NAC 445B.3405)
   a. The maximum allowable throughput rate for **S2.042 through S2.044, each,** shall not exceed **200.0** gallons of **process solution** per minute, averaged over a calendar day.
   b. Hours
      (1) **S2.042 through S2.044, each,** may operate a total of **24** hours per day.

3. Emission Limits (NAC 445B.305, NAC 445B.3405)
   The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.042 through S2.044, combined,** the following pollutants in excess of the following specified limits:
   a. NAC 445B.22017 – The opacity from the final exhaust stack of **S2.042 through S2.044** shall not equal or exceed **20** percent.

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)
   The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
   a. Monitor and record the throughput for **S2.042 through S2.044, each,** for each calendar day.
   b. Record the corresponding average throughput rate in gallons per minute. The average throughput rate shall be determined from the total daily throughput and the total daily minutes of operation.
   c. Record the throughput rate of material, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
   d. Monitor and record the minutes of operation for **S2.042 through S2.044, each,** for each calendar day.

5. Federal Requirements
   National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart EEEEEEE – Gold Mine Ore Processing and Production
   The Permittee, upon issuance of this operating permit, shall comply with the requirements of 40 CFR Part 63 Subpart EEEEEEE, as set forth in **Section V** of this operating permit.

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Section IV. Specific Operating Conditions (continued)

C. Emission Unit S2.045

System 23 – Refinery - Retort (Electric)		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.045	Mercury Retort (Electric) (MOPTC AP1041-4682, TU4.005)	4,467,525	409,080

1. Air Pollution Control Equipment (NAC 445B.3405)
   a. Emissions from **S2.045** shall be controlled by a **condenser** and a **carbon bed** in series.
   b. Descriptive Stack Parameters
      Stack Height: 25.0 feet
      Stack Diameter: 0.33 feet
      Stack Temperature: 150 °F
      Exhaust Flow: 60.0 dry standard cubic feet per minute (dscfm)

2. Operating Parameters (NAC 445B.3405)
   a. The maximum allowable throughput rate for **S2.045** shall not exceed **1.50** tons per batch of **precious metal bearing material**, nor more than **547.5** tons per 12-month rolling period. **Precious metal bearing material** is defined by the following:
      (1) Material loaded with precious metals such as gold and silver, along with various other metals that is produced by electrowinning, the Merrill-Crowe process, flotation and gravity separation processes, and other gold concentration or precipitation processes.
      (2) Material collected from the wash-down of any equipment or surfaces contacted with precious metals that have been concentrated through the various concentration methods employed by precious metal mines.
   b. Hours
      (1) **S2.045** may operate a total of **24** hours per day.

3. Emission Limits (NAC 445B.305, NAC 445B.3405)
   The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.045** the following pollutants in excess of the following specified limits:
   a. NAC 445B.22017 – The opacity from the final exhaust stack of **S2.045** shall not equal or exceed **20** percent.

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)
   The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
   a. Monitor and record the throughput for each batch processed in **S2.045** for each calendar day.
   b. Record the throughput rate of material, in tons, on a cumulative monthly basis, for each 12-month rolling period.
   c. Monitor and record the hours of operation for **S2.045** for each calendar day.

5. Federal Requirements
   National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart EEEEEEE – Gold Mine Ore Processing and Production
   The Permittee, upon issuance of this operating permit, shall comply with the requirements of 40 CFR Part 63 Subpart EEEEEEE, as set forth in **Section V** of this operating permit.

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Section IV. Specific Operating Conditions (continued)

D. Emission Unit S2.046

System 24 – Refinery - Furnace		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.046	Furnace (Electric) (MOPTC AP1041-4682, TU4.006)	4,467,525	409,076

1. Air Pollution Control Equipment (NAC 445B.3405)
   a. Emissions from **S2.046** shall be controlled by a **baghouse** and a **carbon bed** in series.
   b. Descriptive Stack Parameters
      Stack Height: 25.0 feet
      Stack Diameter: 1.25 feet
      Stack Temperature: 100 °F
      Exhaust Flow: 4,000.0 dry standard cubic feet per minute (dscfm)

2. Operating Parameters (NAC 445B.3405)
   a. The maximum allowable throughput rate for **S2.046** shall not exceed **0.50** tons per batch of **precious metal bearing material & fluxing agents**, nor more than **547.5** tons per 12-month rolling period. **Precious metal bearing material & fluxing agents** is defined by the following:
      (1) Material loaded with precious metals such as gold and silver, along with various other metals that is produced by electrowinning, the Merrill-Crowe process, flotation and gravity separation processes, and other gold concentration or precipitation processes.
      (2) Material collected from the wash-down of any equipment or surfaces contacted with precious metals that have been concentrated through the various concentration methods employed by precious metal mines.
      (3) Material containing precious metals collected from the baghouse.
   b. Hours
      (1) **S2.046** may operate a total of **24** hours per day.

3. Emission Limits (NAC 445B.305, NAC 445B.3405)
   The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the final exhaust stack of **S2.046** the following pollutants in excess of the following specified limits:
   a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   b. The discharge of **PM_{10}** (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   c. The discharge of **$PM_{2.5}$** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.069** pounds per hour, nor more than **0.30** tons per 12-month rolling period.
   d. NAC 445B.22017 – The opacity from the final exhaust stack of **S2.046** shall not equal or exceed **20** percent.
   e. NAC 445B.22033 – The maximum allowable discharge of **PM_{10}** to the atmosphere from **S2.046** shall not exceed **0.64** pounds per hour.

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Section IV. Specific Operating Conditions (continued)

D. Emission Unit S2.046 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)
The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
   a. Monitor and record the throughput for each batch processed in **S2.046** for each calendar day.
   b. Record the throughput rate of material, in tons, on a cumulative monthly basis, for each 12-month rolling period.
   c. Monitor and record the hours of operation for **S2.046** for each calendar day.
   d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.046** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
   e. Inspect the baghouse installed on **S2.046** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.

5. Performance and Compliance Testing (NAC 445B.3405, (NAC 445B.252(1))
The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:
   a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
   b. Testing shall be conducted on the exhaust stack (post controls).
   c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
   d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
   e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
   f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. Federal Requirements
National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart EEEEEEE – Gold Mine Ore Processing and Production
The Permittee, upon issuance of this operating permit, shall comply with the requirements of 40 CFR Part 63 Subpart EEEEEEE, as set forth in **Section V** of this operating permit.

******End of Specific Operating Conditions******

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section V. Mercury Emission Standards

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts

1. Affected Source – Carbon Processes with Mercury Retorts (40 CFR 63.11640)
The following process units listed in **Table V-01** define the **new** affected source for Carbon Processes with Mercury Retorts:

Table V-01
40 CFR Part 63, Subpart EEEEEEE Affected Source – Carbon Processes with Mercury Retorts

Process Unit Description	Final Emission Point
System 21 – Refinery – Carbon Kiln (Electric) • S2.041 – Carbon Kiln (Electric) (MOPTC AP1041-4682, TU4.001)	Carbon Bed
System 22 – Refinery – Electrowinning Circuit • S2.042 – Electrowinning Circuit (6 Cells) (TU4.002 in MOPTC AP1041-4682) • S2.044 – Eluant Tank (TU4.004 in MOPTC AP1041-4682)	Carbon Bed
System 23 – Refinery – Retort • S2.045 – Mercury Retort (Electric) (TU4.005 in MOPTC AP1041-4682)	Carbon Bed
System 24 – Refinery – Furnace • S2.046 – Furnace (Electric) (TU4.006 in MOPTC AP1041-4682)	Carbon Bed

2. Compliance Date (40 CFR 63.11641)
Permittee must comply with the provisions of Subpart EEEEEEE upon startup. (40 CFR 63.11641(c))

3. Mercury Emission Standards (40 CFR 63.11645)
Permittee shall not discharge or cause to be discharged from the assemblage of process units listed in **Table V-01** of this section, combined mercury emissions in excess of the following limit for the **new** affected source:
   a. For **new** carbon processes with mercury retorts, the Permittee must emit no more than **0.8 pounds** of **mercury** per ton of concentrate processed. (40 CFR 63.11645(f))
   b. The standards set forth in 40 CFR Part 63 Subpart EEEEEEE at all times. (40 CFR 63.11645(i))

4. Compliance Requirements (40 CFR 63.11646)
   a. Except as provided in paragraph (b) of 40 CFR 63.11646, the Permittee must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources, according to those applicable requirements in paragraphs (a)(1) through (13) of 40 CFR Part 63.11646. 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. (40 CFR 63.11646(a))
      (1) The Permittee must determine the concentration of mercury and the volumetric flow rate of the stack gas according to the following test methods and procedures. (40 CFR 63.11646(a)(1))
         (a) Method 1 or 1A (40 CFR Part 60, Appendix A-1) to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) and prior to any releases to the atmosphere. (40 CFR 63.11646(a)(1)(i))
         (b) Method 2, 2A, 2C, 2D, 2F (40 CFR Part 60, Appendix A-1), or Method 2G (40 CFR Part 60, Appendix A-2) to determine the volumetric flow rate of the stack gas. (40 CFR 63.11646(a)(1)(ii))
         (c) Method 3, 3A, or 3B (40 CFR Part 60, Appendix A-2) to determine the dry molecular weight of the stack gas. Permittee may use ANSI/ASME PTC 19.10, "Flue and Exhaust Gas Analyses" (incorporated by reference-see 40 CFR 63.14) as an alternative to EPA Method 3B. (40 CFR 63.11646(a)(1)(iii))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

4. Compliance Requirements (40 CFR 63.11646)
   a. Except as provided in paragraph (b) of 40 CFR 63.11646, the Permittee must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources, according to those applicable requirements in paragraphs (a)(1) through (13) of 40 CFR Part 63.11646. 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. (40 CFR 63.11646(a)) (continued)
      (1) The Permittee must determine the concentration of mercury and the volumetric flow rate of the stack gas according to the following test methods and procedures. (40 CFR 63.11646(a)(1)) (continued)
         (d) Method 4 (40 CFR Part 60, Appendix A-3) to determine the moisture content of the stack gas. (40 CFR 63.11646(a)(1)(iv))
         (e) Method 29 (40 CFR Part 60, Appendix A-8) to determine the concentration of mercury, except as provided in paragraphs (a)(1)(vi) and (vii) of 40 CFR 63.11646. (40 CFR 63.11646(a)(1)(v))
         (f) Upon approval by the permitting authority, ASTM D6784; "Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)" (incorporated by reference—see 40 CFR 63.14) may be used as an alternative to Method 29 to determine the concentration of mercury. (40 CFR 63.11646(a)(1)(vi))
         (g) Upon approval by the permitting authority, Method 30B (40 CFR Part 60, Appendix A-8) may be used as an alternative to Method 29 to determine the concentration of mercury for those process units with relatively low particulate-bound mercury as specified in Section 1.2 of Method 30B. (40 CFR 63.11646(a)(1)(vii))
      (2) A minimum of three test runs must be conducted for each performance test of each process unit. Each test run conducted with Method 29 must collect a minimum sample volume of 0.85 dry standard cubic meters (30 dry standard cubic feet). If conducted with Method 30B or ASTM D6784, determine sample time and volume according to the testing criteria set forth in the relevant method. If the emission testing results for any of the emission points yields a non-detect value, then the minimum detection limit (MDL) must be used to calculate the mass emissions rate (lb/hr) used to calculate the emissions factor (lb/ton) for that emission point and, in turn, for calculating the sum of the emissions (in units of pounds of mercury per ton of concentrate, or pounds of mercury per million tons of ore) for all emission points subject to the emission standard for determining compliance. If the resulting mercury emissions are greater than the MACT emission standard, the Permittee may use procedures that produce lower MDL results and repeat the mercury emissions testing one additional time for any emission point for which the measured result was below the MDL. If this additional testing is performed, the results from that testing must be used to determine compliance (i.e., there are no additional opportunities allowed to lower the MDL). (40 CFR 63.11646(a)(2))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

4. Compliance Requirements (40 CFR 63.11646)

a. Except as provided in paragraph (b) of 40 CFR 63.11646, the Permittee must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources, according to those applicable requirements in paragraphs (a)(1) through (13) of 40 CFR Part 63.11646. 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. (40 CFR 63.11646(a)) (continued)

(3) Performance tests shall be conducted under such conditions as the Administrator specifies to the Permittee based on representative performance of the affected source for the period being tested. Upon request, the Permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance tests must be conducted under operating conditions (including process or production throughputs) that are based on representative performance. Record and report to the permit authority the process throughput for each test run. For sources with multiple emission units (e.g., two roasters, or a furnace, electrowinning circuit and a mercury retort) ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the Permittee may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable. If the performance test is conducted when all affected units are operating, then the number of hours of operation used for calculating emissions pursuant to paragraphs (a)(6) and (7) of 40 CFR 63.11646 must be the total number of hours for the unit that has the greatest total operating hours for that period of time, or based on an appropriate alternative method approved by the permit authority to account for the hours of operation for each separate unit in these calculations. (40 CFR 63.11646(a)(3))

(4) Calculate the mercury emission rate (lb/hr), based on the average of 3 test run values, for each process unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (a)(3) of 40 CFR 63.11646) using Equation (1) of this section: (40 CFR 63.11646(a)(4))

$$E = C_s * Q_s * K \qquad \text{(Eq. 1)}$$

Where:
E = mercury emissions in lb/hr;
C_S = concentration of mercury in the stack gas, in grains per dry standard cubic foot (gr/dscf);
Q_S = volumetric flow rate of the stack gas, in dry standard cubic feet per hour; and
K = conversion factor for grains (gr) to pounds (lb), 1.43×10^{-4}.

(5) Monitor and record the number of one-hour periods each process unit operates during each month. (40 CFR 63.11646(a)(5))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

4. Compliance Requirements (40 CFR 63.11646)
   a. Except as provided in paragraph (b) of 40 CFR 63.11646, the Permittee must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources, according to those applicable requirements in paragraphs (a)(1) through (13) of 40 CFR Part 63.11646. 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. (40 CFR 63.11646(a)) (continued)
      (6) For the initial compliance determination for both new and existing sources, determine the total mercury emissions for all the full calendar months between the compliance date and the date of the initial compliance test by multiplying the emission rate in lb/hr for each process unit (or combination of units ducted to a common stack that are tested together) by the number of one-hour periods each process unit (or the unit that had the greatest total operating hours among the combination of multiple units with one stack that are tested together, or an alternative method approved by the permit authority, pursuant to paragraph (a)(3) of 40 CFR 63.11646) operated during those full calendar months prior to the initial compliance test. This initial period must include at least 1 full month of operations. After the initial compliance test, for subsequent compliance tests, determine the mercury mass emissions for the 12 full calendar months prior to the compliance test in accordance with the procedures in paragraph (a)(7) of 40 CFR 63.11646. Existing sources may use a previous emission test for their initial compliance determination in lieu of conducting a new test if the test was conducted within one year of the compliance date using the methods specified in paragraphs (a)(1) through (a)(4) of 40 CFR 63.11646, and the tests were representative of current operating processes and conditions. If a previous test is used for their initial compliance determination, 3 to 12 full months of data on hours of operation and production (i.e., million tons of ore or tons of concentrate), including the month the test was conducted, must be used to calculate the emissions rate (in units of pounds of mercury per million tons of ore for the ore pretreatment affected sources, or in units of pounds of mercury per tons of concentrate for the other affected sources). (40 CFR 63.11646(a)(6))
      (7) For compliance determinations following the initial compliance test for new and existing sources, determine the total mercury mass emissions for each process unit for the 12 full calendar months preceding the performance test by multiplying the emission rate in lb/hr for each process unit (or combination of units ducted to a common stack that are tested together) by the number of one-hour periods each process unit (or the unit that had the greatest total operating hours among the combination of multiple units with one stack that are tested together, or an alternative method approved by the permit authority, pursuant to paragraph (a)(3) of 40 CFR 63.11646) operated during the 12 full calendar months preceding the completion of the performance tests. (40 CFR 63.11646(a)(7))
      (8) Measure the weight of concentrate (produced by electrowinning, Merrill Crowe process, gravity feed, or other methods) using weigh scales for each batch prior to processing in mercury retorts or melt furnaces. For facilities with mercury retorts, the concentrate must be weighed in the same state and condition as it is when fed to the mercury retort. For facilities without mercury retorts, the concentrate must be weighed prior to being fed to the melt furnace before drying in any ovens. For facilities that ship concentrate offsite, measure the weight of concentrate as shipped offsite. The Permittee must keep accurate records of the weights of each batch of concentrate processed and calculate, and record the total weight of concentrate processed each month. (40 CFR 63.11646(a)(9))
      (9) The Permittee must maintain the systems for measuring density, volumetric flow rate, and weight within ±5 percent accuracy. The Permittee must describe the specific equipment used to make measurements at the facility and how that equipment is periodically calibrated. The Permittee must also explain, document, and maintain written procedures for determining the accuracy of the measurements and make these written procedures available to the permitting authority upon request. The Permittee must determine, record, and maintain a record of the accuracy of the measuring systems before the beginning of the initial compliance test and during each subsequent quarter of affected source operation. (40 CFR 63.11646(a)(10))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

4. Compliance Requirements (40 CFR 63.11646)
   a. Except as provided in paragraph (b) of 40 CFR 63.11646, the Permittee must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources, according to those applicable requirements in paragraphs (a)(1) through (13) of 40 CFR Part 63.11646. 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. (40 CFR 63.11646(a)) (continued)
      (10) Record the weight in tons of ore for ore pretreatment processes and concentrate for carbon processes with mercury retorts, carbon processes without mercury retorts, and for non-carbon concentrate processes on a daily and monthly basis. (40 CFR 63.11646(a)(11))
      (11) Calculate the emissions from each new and existing affected source for the sum of all full months between the compliance date and the date of the initial compliance test in pounds of mercury per ton of process input using the procedures in paragraphs (a)(12)(i) through (a)(12)(iv) of 40 CFR 63.11646 to determine initial compliance with the emission standards in 40 CFR 63.11645. This must include at least 1 full month of data. Or, if a previous test is used pursuant to paragraph (a)(6) of 40 CFR 63.11646 for the initial compliance test, use a period of time pursuant to paragraph (a)(6) of 40 CFR 63.11646 to calculate the emissions for the affected source. After this initial compliance test period, determine annual compliance using the procedures in paragraph (a)(13) of 40 CFR 63.11646 for existing sources. (40 CFR 63.11646(a)(12))
         (a) For carbon processes with mercury retorts, divide the sum of mercury mass emissions (in pounds) from all carbon kilns, preg tanks, electrowinning, mercury retorts, and melt furnaces during the initial number of full months between the compliance date and the initial compliance tests by the total amount of concentrate (in tons) processed in these process units during those same full months following the compliance date. If a previous test is used to determine initial compliance, pursuant to paragraph (a)(6) of 40 CFR 63.11646, then the same 3 to 12 full months of production data (i.e., tons of concentrate) and hours of operation referred to in paragraph (a)(6) of 40 CFR 63.11646, must be used to determine the emissions in pounds of mercury per tons of concentrate. (40 CFR 63.11646(a)(12)(ii))
      (12) After the initial compliance test, calculate the emissions from each new and existing affected source for each 12-month period preceding each subsequent compliance test in pounds of mercury per ton of process input using the procedures in paragraphs (a)(13)(i) through (iv) of 40 CFR 63.11646 to determine compliance with the emission standards in 40 CFR 63.11645. (40 CFR 63.11646(a)(13))
         (a) For carbon processes with mercury retorts, divide the sum of mercury mass emissions (in pounds) from all carbon kilns, preg tanks, electrowinning, mercury retorts, and melt furnaces in the 12-month period preceding a compliance test by the total amount of concentrate (in tons) processed in these process units in that 12-month period. (40 CFR 63.11646(a)(13)(ii))
   b. At all times, the Permittee must operate and maintain any 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.11646(b))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

5. Monitoring Requirements (40 CFR 63.11647)
   a. The Permittee must monitor each process unit at each new and existing affected source that uses a carbon adsorber to control mercury emissions using the procedures in paragraphs (f)(1) or (f)(2) of 40 CFR 63.11647. A carbon adsorber may include a fixed carbon bed, carbon filter packs or modules, carbon columns, and other variations. (40 CFR 63.11647(f))
      (1) Continuously sample and analyze the exhaust stream from the carbon adsorber for mercury using Method 30B (40 CFR part 60, Appendix A-8) for a duration of at least the minimum sampling time specified in Method 30B and up to one week that includes the period of the annual performance test. (40 CFR 63.11647(f)(1))
         (a) Establish an upper operating limit for the process as determined using the mercury concentration measurements from the sorbent trap (Method 30B) as calculated from Equation (3) of 40 CFR 63.11647. (40 CFR 63.11647(f)(1)(i))

$$OLC = C_{trap} * (EL/CT) \quad \text{(Eq. 3)}$$

Where:
OLC = mercury concentration operating limit for the carbon adsorber control device on the process as measured using the sorbent trap, (micrograms per cubic meter);
C_{trap} = average mercury concentration measured using the sorbent trap during the week that includes the compliance performance test, (micrograms per cubic meter);
EL = emission standard for the affected sources (lb/ton of concentrate);
CT = compliance test results for the affected sources (lb/ton of concentrate).

         (b) Sample and analyze the exhaust stream from the carbon adsorber for mercury at least monthly using Method 30B (40 CFR art 60, Appendix A-8). When the mercury concentration reaches 75 percent of the operating limit, begin weekly sampling and analysis. When the mercury concentration reaches 90 percent of the operating limit, replace the carbon in the carbon adsorber within 30 days. If mercury concentration exceeds the operating limit, change the carbon in the carbon adsorber within 30 days and report the deviation to the permitting authority. (40 CFR 63.11647(f)(1)(ii))
      (2) Conduct an initial sampling of the carbon in the carbon bed for mercury 90 days after the replacement of the carbon. A representative sample must be collected from the inlet of the bed and the exit of the bed and analyzed using SW-846 Method 7471B (incorporated by reference—see 40 CFR 63.14). The depth to which the sampler is inserted must be recorded. The design capacity is established by calculating the average carbon loading from the inlet and outlet measurements. Sampling and analysis of the carbon bed for mercury must be performed quarterly thereafter. When the carbon loading reaches 50 percent of the design capacity of the carbon, monthly sampling must be performed until 90 percent of the carbon loading capacity is reached. The carbon must be removed and replaced with fresh carbon no later than 30 days after reaching 90 percent of capacity. For carbon designs where there may be multiple carbon columns or beds, a representative sample may be collected from the first and last column or bed instead of the inlet or outlet. If the carbon loading exceeds the design capacity of the carbon, change the carbon within 30 days and report the deviation to the permitting authority. (40 CFR 63.11647(f)(2))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

5. Monitoring Requirements (40 CFR 63.11647) (continued)
   b. The Permittee must monitor gas stream temperature at the inlet to the carbon adsorber for each process unit (i.e., carbon kiln, melt furnace, etc.) equipped with a carbon adsorber. Establish a maximum value for the inlet temperature either during the annual performance test (required in 40 CFR 63.11646(a)), according to the manufacturer's specifications, or as approved by the permitting authority. If the Permittee choose to establish the temperature operating limit during the performance test, establish the temperature operating limit based on either the highest reading during the test or at 10 °F higher than the average temperature measured during the performance test. Monitor the inlet temperature once per shift. If an inlet temperature exceeds the temperature operating limit, the Permittee must take corrective actions to get the temperature back within the parameter operating limit within 48 hours. If the exceedance persists, within 144 hours of the exceedance, the Permittee must sample and analyze the exhaust stream from the carbon adsorber using Method 30B (40 CFR part 60, Appendix A-8) and compare to an operating limit (calculated pursuant to (f)(1)(i)) or conduct carbon sampling pursuant to (f)(2) of 40 CFR 63.11647. If the concentration measured with Method 30B is below 90 percent of the operating limit or the carbon sampling results are below 90 percent of the carbon loading capacity, the Permittee may set a new temperature operating limit 10 °F above the previous operating limit or at an alternative level approved by the permit authority. If the concentration is above 90 percent of the operating limit or above 90 percent of the carbon loading capacity the Permittee must change the carbon in the bed within 30 days and report the event to the permitting authority, and reestablish an appropriate maximum temperature limit based on approval of the permit authority. (40 CFR 63.11647(g))
   c. The Permittee may conduct additional compliance tests according to the procedures in 40 CFR 63.11646 and re-establish the operating limits required in paragraphs (a) through (c) and (f) through (h) of 40 CFR 63.11647 at any time. The Permittee must submit a request to the permitting authority for approval to re-establish the operating limits. In the request, the Permittee must demonstrate that the proposed change to the operating limit detects changes in levels of mercury emission control. An approved change to the operating limit under this paragraph only applies until a new operating limit is established during the next annual compliance test. (40 CFR 63.11647(i))

6. Notification, Reporting, Recordkeeping (40 CFR 63.11648)
   a. The Permittee must submit the Initial Notification required by 40 CFR 63.9(b)(2) no later than 120 calendar days after the date of publication of the final rule in the Federal Register or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in 40 CFR 63.9(b)(2)(i) through (b)(2)(iv). (40 CFR 63.11648(a))
   b. The Permittee must submit an initial Notification of Compliance Status as required by 40 CFR 63.9(h). (40 CFR 63.11648(b))
   c. If a deviation occurs during a semiannual reporting period, the Permittee must submit a deviation report to the permitting authority according to the requirements in paragraphs (c)(1) and (2) of 40 CFR 63.11648. (40 CFR 63.11648(c))
      (1) The first reporting period covers the period beginning on the compliance date specified in 40 CFR 63.11641 and ending on June 30 or December 31, whichever date comes first after the Permittee's compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. The Permittee's deviation report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period. (40 CFR 63.11648(c)(1))
      (2) A deviation report must include the information in 40 CFR 63.11648(c)(2)(i) through 40 CFR 63.648(c)(2)(iv). (40 CFR 63.11648(c)(2))
         (a) Company name and address. (40 CFR 63.11648(c)(2)(i))
         (b) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the content of the report. (40 CFR 63.11648(c)(2)(ii))
         (c) Date of the report and beginning and ending dates of the reporting period. (40 CFR 63.11648(c)(2)(iii))
         (d) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken. (40 CFR 63.11648(c)(2)(iv))

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Section V. Mercury Emission Standards (continued)

A. NESHAP for the Gold Mine Ore Processing and Production Area Source Category – 40 CFR Part 63, Subpart EEEEEEE (40 CFR 63.11640 et. seq.) – Carbon Processes with Mercury Retorts (continued)

6. Notification, Reporting, Recordkeeping (40 CFR 63.11648) (continued)
   d. If the Permittee had a malfunction during the reporting period, the compliance report required in 40 CFR 63.11648(b) 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 Permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.11646(b), including actions taken to correct a malfunction. (40 CFR 63.11648(d))
   e. The Permittee must keep the records specified in paragraphs (e)(1) through (e)(3) of 40 CFR 63.11648. The form and maintenance of records must be consistent with the requirements in 40 CFR 63.10(b)(1) of the General Provisions. (40 CFR 63.11648(e))
      (1) As required in 40 CFR 63.10(b)(2)(xiv), the Permittee must keep a copy of each notification that the Permittee submitted to comply with 40 CFR Part 63 Subpart EEEEEEE and all documentation supporting any Initial Notification, Notification of Compliance Status, and semiannual compliance certifications that the Permittee submitted. (40 CFR 63.11648(e)(1))
      (2) The Permittee must keep the records of all performance tests, measurements, monitoring data, and corrective actions required by 40 CFR 63.11646 and 40 CFR 63.11647, and the information identified in paragraphs (c)(2)(i) through (c)(2)(vi) of 40 CFR 63.11648 for each corrective action required by 40 CFR 63.11647. (40 CFR 63.11648(e)(2))
         (a) The date, place, and time of the monitoring event requiring corrective action; (40 CFR 63.11648(e)(2)(i))
         (b) Technique or method used for monitoring; (40 CFR 63.11648(e)(2(ii))
         (c) Operating conditions during the activity; (40 CFR 63.11648(e)(2)(iv))
         (d) 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; and (40 CFR 63.11648(e)(2)(v))
         (e) Maintenance or corrective action taken (if applicable). (40 CFR 63.11648(e)(2)(vi))
      (3) The Permittee must keep records of operating hours for each process as required by 40 CFR 63.11646(a)(5) and records of the monthly quantity of ore and concentrate processed or produced as required by 40 CFR 63.11646(a)(10). (40 CFR 63.11648(e)(3))
   f. The Permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each recorded action. The Permittee must keep each record onsite for at least 2 years after the date of each recorded action according to 40 CFR 63.10(b)(1). The Permittee may keep the records offsite for the remaining 3 years. (40 CFR 63.11648(f))
   g. After December 31, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the Permittee 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 Permittee 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. (40 CFR 63.11648(g))

******End of Mercury Emission Standards******

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section VI. Emission Caps

A. Not Applicable.

******End of Emission Caps******

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section VII. Surface Area Disturbance Conditions

The surface area disturbance for the **Spring Valley Mine Project** is **6,303.0** acres.

A. Fugitive Dust (NAC 445B.22037)

1. The Permittee may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
2. Except as otherwise provided in NAC 445B.22037(4), the Permittee may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in NAC 445B.22037, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.
3. Except as provided in NAC 445B.22037(4), the Permittee may not disturb or cover 5 acres or more of land or its topsoil until Permittee has obtained an Operating permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
4. The provisions of NAC 445B.22037(2) and (3) do not apply to:
   a. Agricultural activities occurring on agricultural land; or
   b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

******End of Surface Area Disturbance Conditions******

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section VIII. Schedules of Compliance

A. Not Applicable

******End of Schedule of Compliance ******

Facility ID No. A2214 *Permit No.* AP1041-4681
CLASS I AIR QUALITY OPERATING PERMIT

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Section IX. Amendments

This permit:

1. **Shall be posted conspicuously at or near the stationary source. (NAC 445B.318(5))**
2. **Shall expire and be subject to renewal five (5) years from:** Date . **(NAC 445B.315(3)(a))**
3. **A completed application for renewal of an operating permit must be submitted to the Director on the form provided by the Director with the appropriate fee at least 240 calendar days before the expiration date of this operation permit (NAC 445B.3443(2)). The Director shall determine whether the application is complete within 60 days of receipt of the application (NAC 445B.3395).**
4. **Any party aggrieved by the Department's decision to issue this permit may appeal to the State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)**

THIS PERMIT EXPIRES ON: Date

Signature: _____

Issued by: Jaimie Mara, P.E.
Supervisor, Permitting Branch
Bureau of Air Pollution Control

Phone: (775) 687- 9343 Date: Signature Date

bh XX/25

Issued to: SOLIDUS RESOURCES, LLC – SPRING VALLEY MINE PROJECT (AS PERMITTEE)

Class I Non-Permit Equipment List

Appended to Permit #AP**1041**–**4680**

Emission Unit #	Emission Unit Description
The Class I Operating Permit for Solidus Resources, LLC will not contain any references to Insignificant Activities. The companion minor source (Class II) Air Quality Operating Permit AP1041-4680 will contain the list of Insignificant Activities for the facility.	