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Facility ID No. A0404

Permit No. AP1041-2690

MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to:The Plum Mining Company, LLC (hereinafter referred to as *the Permittee*)Mailing Address:P.O. Box 1118, VIRGINIA CITY, NEVADA 89440Physical Address:1200 American Flats Road, Gold Hill, Nevada 89440General Facility Location:Sections 5, 6, 7, and 8 of T 16N, R 21E, MDB&M
HA 103 – Dayton Valley/ Storey County
North 4,350.64 km, East 269.85 km UTM Zone 11 – NAD 83

Thermal Unit List: (2 Thermal Units)

A. System 01 - Retort

TU 4.001 Mercury Retort, manufactured by Scotia International of Nevada, model number MR-01, serial number 1013150

B. System 02 – Furnace

TU 4.002 Melt Furnace, manufactured by State of Maine Mining Co., model number T200, serial number Not specified



MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section I. General Conditions

The Permittee must comply with, but is not limited to, all conditions of Nevada Administrative Code (NAC) 445B.3611-3689 "*Nevada Mercury Air Emissions Control Program*", inclusive.

A. <u>Records Retention</u>. NAC 445B.3679.2(a)

The Permittee of a Mercury Operating Permit to Construct shall retain records of all required monitoring data and support information for (5) years after the date of the sample collection, measurement, report or analysis. Supporting information includes, without limitation, all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.

B. <u>Severability</u>. NAC 445B.3679.2(b)

Each of the conditions and requirements of the Mercury Operating Permit to Construct is severable and, if any are held invalid, the remaining conditions and requirements continue in effect.

C. Compliance/Noncompliance. NAC 445B.3679.2(c)

The Permittee must comply with all conditions of the Mercury Operating Permit to Construct. Any noncompliance constitutes a violation and is grounds for:

- 1. An action for noncompliance;
- 2. The revoking and reissuing, or the terminating of the Mercury Operating Permit to Construct by the Director; or
- 3. The reopening or revising of the Mercury Operating Permit to Construct by the holder of the Mercury Operating Permit to Construct as directed by the Director.
- D. Defense to Noncompliance. NAC 445B.3679.2(d)

The need to halt or reduce activity to maintain compliance with the conditions of the Mercury Operating Permit to Construct is not a defense to noncompliance with any conditions of the Mercury Operating Permit to Construct.

- E. <u>Cause.</u> NAC 445B.3679.2(e) The Director may revise, revoke and reissue, reopen and revise, or terminate the Mercury Operating Permit to Construct for cause.
- F. <u>Property Rights/Exclusive Privilege</u>. NAC 445B.3679.2(f) The Mercury Operating Permit to Construct does not convey any property rights or any exclusive privilege.
- G. Information Request from Director. NAC 445B.3679.2(g)

The Permittee shall provide the Director, in writing and within a reasonable time, with any information that the Director requests to determine whether cause exists for revoking or terminating the Mercury Operating Permit to Construct or to determine compliance with the conditions of this Mercury Operating Permit to Construct.

H. Right to Entry. NAC 445B.3679.2(h)

The Permittee shall allow the Director or any authorized representative of the Director, upon the presentation of credentials, to:

- 1. Enter upon the premises of *the Permittee* where:
 - a. The thermal unit that emits mercury is located;
 - b. Activity related to mercury emissions is conducted; or
 - c. Records are kept pursuant to the conditions of the Mercury Operating Permit to Construct.
- 2. Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of the Mercury Operating Permit to Construct;
- 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 Mercury Operating Permit to Construct; and
- 4. Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of the Mercury Operating Permit to Construct or applicable requirements.



Nercury OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section I. General Conditions (continued)

I. Certify True and Accurate. NAC 445B.3679.2(i)

A responsible official of the stationary source shall certify that, based on information and belief formed after reasonable inquiry, the statements made in any document required to be submitted by any condition of the Mercury Operating Permit to Construct are true, accurate and complete.

J. <u>Yearly Reporting.</u> NAC 445B.3679.3(b, c, d)

The Permittee will submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, emissions and mercury co-product. These reports will be submitted on the form provided by the Bureau of Air Pollution Control for all emission units/systems specified on the form. The completed form must be submitted to the Bureau of Air Pollution Control no later than March 1 annually for the preceding calendar year, unless otherwise approved by the Bureau of Air Pollution Control.

K. Facilities Operation. NAC 445B.227

- The Permittee may not:
- 1. Operate a stationary source of air pollution unless the control equipment for air pollution that is required by applicable requirements or conditions of the Mercury Operating Permit to Construct are 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 Mercury Operating Permit to Construct.

L. Excess Emissions. NAC 445B.232

- 1. Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive, must be approved by the Director and performed during a time designated by the Director as being favorable for atmospheric ventilation.
- 2. The Director must be notified in writing of the time and expected duration at least 24 hours in advance of any scheduled maintenance which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive.
- 3. The Director must be notified in writing or by telephone of the time and expected duration at least 24 hours in advance of any scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, inclusive.
- 4. The Director must be notified of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment for controlling pollution or during startup or shutdown of such equipment. The telephone number for the notification is (775) 687-9350.
- 5. *The Permittee*, as the owner or operator of an affected facility, shall provide the Director, within 15 days after any malfunction, upset, startup, 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 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.



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FOR GENERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section I. General Conditions (continued)

M. Construction Requirements: New or Modified Thermal Units. NAC 445B.250

The Permittee shall provide the Director written notification of:

- 1. The date that construction or reconstruction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply to mass-produced facilities which are purchased in completed form.
- 2. The anticipated date of initial startup of an affected facility, postmarked not more than 60 days and not less than 30 days prior to such date.
- 3. The actual date of initial startup of an affected facility, postmarked within 15 days after such date.

N. Annual Testing.

Before the conclusion of each calendar year, *the Permittee* shall:

- Conduct and record a Method 29 (or alternative test method approved by the Director) compliance test for mercury on the exhaust stack of Systems 01 - 02 consisting of three valid runs. Each of the three test runs must collect a sample volume of 1.7 dry standard cubic meters (60 dscf) or be conducted for up to two hours in an effort to collect this sample volume (NAC 445B.3679.3).
- Simultaneously, during the Method 29 (or alternative test method approved by the Director) compliance test, conduct and record a material assay from Systems 01 - 02. One representative sample shall be taken for each test run. Total mercury content shall be determined using EPA Method 7471B (cold vapor atomic adsorption analysis) (or alternative test method approved by the Director) (NAC 445B.3679.3).
- 3. Conduct tests of performance under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The owner or operator 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 startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).
- 4. 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 (NAC 445B.252.4).
- 5. Furnish the Director within 60 days after completing the performance tests a written and electronic report of the results of the performance tests. 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 (NAC 445B.252.8).
- O. SIP Article 2.5.4 Federally Enforceable SIP Requirement.

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.

- P. Expiration and Extension. NAC 445B.3687
 - 1. If construction will occur in one phase, a mercury operating permit to construct for a new or modified thermal unit that emits mercury expires if construction is not commenced within 18 months after the date of issuance thereof or construction of the thermal unit that emits mercury is delayed for 18 months after initiated. The Director may extend the date on which the construction may be commenced upon a showing that the extension is justified.
 - 2. If construction will occur in more than one phase, the projected date of the commencement of construction of each phase of construction must be approved by the Director. A mercury operating permit to construct expires if the initial phase of construction is not commenced within 18 months after the projected date of the commencement of construction approved by the Director. The Director may extend only the date on which the initial phase of construction may be commenced upon a showing that the extension is justified.



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Issued to: Plum Mining Company, LLC Section I. General Conditions (continued)

Q. Construction Requirements. NAC 445B.250

- 1. The NvMACT for **TU 4.001 and TU 4.002 each**, must be implemented not later than 24 months after the issuance date of this mercury operating permit to construct (NAC 445B.3679.3(a)(2)(i)).
 - a. The issuance date for TU 4.001 and TU 4.002 is July 27, 2011.
- 2. The *Permittee* shall provide the Director written notification of :
 - a. The date of implementation of NvMACT for **TU 4.001 and TU 4.002**, each, pursuant to NAC 445B.3679.3(a)(2)(i) postmarked within 15 days after such date (NAC 445B.3679.2(g)).
- R. <u>Annual Reporting.</u>
 - The Permittee shall:
 - 1. Report mercury co-product on an annual basis (NAC 445B.3679(3)(d)).
 - 2. Report the level of mercury emissions on an annual basis, which must be based on mercury emissions test data (NAC 445B.3679(3)(c)).

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



Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions

A. Thermal Units # TU 4.001 location North 4,350.62 km, East 269.87 km, UTM (Zone 11)

A. System 01 – Retort

TU 4.001 Mercury Retort, manufactured by Scotia International of Nevada, Inc., model number MR-01, serial number 1013150

1. Air Pollution Equipment

- a. Exhaust gases from **TU 4.001** shall be ducted to a control system with 100% capture consisting of:
 - i. Mercury Condenser with chiller (MC-001) (manufactured by Scotia International of Nevada)
 - ii. Carbon Deep Bed Scrubber (CA-001) (manufactured by Scotia International of Nevada)

b. Stack parameters

- i. Height: 20 ft.
- ii. Diameter: 0.83 ft.
- iii. Stack temperature: 250 °F
- iv. Flow: Maximum volume flow rate of 808 dry standard cubic feet per minute (dscfm).
- v. System 01 and System 02 are both ducted to CA-001 and share a common exhaust stack.

2. Operating Requirements

- a. Limitations of Operation NAC 445B.3679.3
 - i. The maximum allowable batch weight of **precious metal precipitate** for **TU 4.001**, shall not exceed **0.49 ton per batch**. "Precious metal precipitate" shall consist only of the following:
 - (a) 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.
 - (b) 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.
 - ii. Mercury emissions from TU 4.001 shall not exceed 1.0×10^{-4} grains per dry standard cubic foot (gr/dscf).
 - iii. The precious metal precipitate shall be retorted in pans specified by the retort manufacturer and not exceed the volume capacity specified by the manufacturer, per pan.
 - iv. TU 4.001 and TU 4.002 may not operate simultaneously.
 - v. Hours
 - (a) TU 4.001 may operate a total of 8,760 hours per calendar year.



MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions (continued)

A. Thermal Units # TU 4.001 (continued)

- b. Work Practice Standards NAC 445B.3679.3
 - i. Retort (**TU 4.001**)
 - (a) During heating **TU 4.001**shall be placed under negative gauge pressure between 250 and 350 mmHg.
 - (b) **TU 4.001** shall automatically shut off via interlock if the negative gauge pressure is less than 250 mmHg.
 - ii. Mercury Condenser (MC-001)
 - (a) The maximum exhaust gas temperature at the discharge of MC-001 shall not exceed 75°F.
 - (b) The condensed mercury from **MC-001** shall be collected monthly.
 - (c) **TU 4.001** shall automatically shut off via interlock if the exhaust gas temperature at the discharge of **MC-001** is above 90°F.
 - (d) **TU 4.001** shall automatically shut off via interlock if water flow into **MC-001** is not present.
 - iii. Carbon Scrubber (CA-001)
 - (a) **CA-001** shall contain no less than **3,000** pounds of sulfur-impregnated carbon.
 - (b) The differential pressure across CA-001 shall not exceed 10 inches of water column.
 - (c) Replace the sulfur-impregnated carbon in CA-001 according to the following schedule: The sulfur-impregnated carbon in CA-001 shall be sampled within 90 days after the notification of implementation of NvMACT operation for either TU 4.001 or TU 4.002, whichever is first, as required in section I.Q above. The depth of the sample probe shall be recorded. Using this sample, the percentage of mercury by weight shall be calculated. If more than one sample is taken, calculate an average carbon loading from all samples. Sampling shall continue quarterly, at the same sample depth until 70% of carbon loading capacity is reached. Sampling of the carbon will then occur monthly until 90% of the carbon loading capacity is reached. The carbon will be replaced with an equivalent performing sulfur-impregnated carbon no later than 30 days after reaching 90% of the carbon loading capacity. The required mercury analysis shall be performed utilizing one of the following methods:
 - 1. EPA method 6020-Inductively Coupled Plasma-Mass Spectrometry;
 - 2. EPA method 7471B- Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique); or
 - 3. An alternative test method as approved in advance by the Director.
 - (d) Any sulfur-impregnated carbon replaced in **CA-001** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent performing sulfur-impregnated carbon.
 - (e) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **CA-001** shall be kept on site.

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3379.3)

a. Compliance Testing

Within 180 days of the notification of the date of implementation of NvMACT for **TU 4.001** as required in Section I.Q, of this section, the *Permittee* shall conduct and record a performance test for mercury on the exhaust stack of **TU 4.001** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR part 60 Appendix A.



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Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions (continued)

A. Thermal Units # TU 4.001 (continued)

b. Monitoring

- The Permittee shall:
- i. Prior to implementation of NvMACT for **TU 4.001**, install, operate, calibrate, and maintain instrumentation to continuously measure and record the following:
 - (a) The negative gauge pressure of **TU 4.001**, in mmHg.
 - (b) The water flow rate into MC-001, in gallons per minute.
 - (c) The outlet gas temperature of MC-001, in degrees Fahrenheit.
 - (d) The differential pressure across CA-001, in inches of water column.
- ii. Prior to implementation of NvMACT for **TU 4.001**, install, operate, calibrate and maintain an interlock that will shut off **TU 4.001**'s heating element if the negative gauge pressure is less than 250 mmHg.
- iii. Prior to implementation of NvMACT for MC-001, install, operate, calibrate and maintain an interlock that will notify the operator when the water flow is not present to MC-001.
- iv. Prior to implementation of NvMACT for MC-001, install, operate, calibrate and maintain an exhaust gas temperature interlock that will shut off the TU 4.001 heating element if the exhaust gas from the condenser is above 90° F.
- v. Monitor the daily batch weight of precious metal precipitate for TU 4.001, in tons, for each batch.
- vi. Monitor the total daily hours of operation per batch for **TU 4.001**, during each day of operation.
- vii. Monitor the negative gauge pressure for TU 4.001 in mmHg, continuously during operation.
- viii. Monitor the outlet gas temperature of MC-001 in degrees Fahrenheit, continuously during operation.
- ix. Monitor the mercury drained from MC-001 in pounds, monthly.
- x. Monitor the differential pressure across CA-001 in inches of water column, continuously during operation.
- xi. Monitor the sulfur-impregnated carbon in **CA-001** for percentage of mercury by weight, quarterly until reaching 70% of the carbon loading capacity and then monthly until reaching 90% of the carbon loading capacity.

c. Recordkeeping

The required monitoring, established in Section A.3.b.i through xi, shall be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

- i. The calendar date of any required monitoring.
- ii. The total daily batch weight of precious metal precipitate for TU 4.001 in tons, for the corresponding date.
- iii. The total daily hours of operation per batch for **TU 4.001** for the corresponding date.
- iv. The negative gauge pressure for **TU 4.001** in mmHg for the corresponding date, continuously during operating, based on a one hour period, for the corresponding date.
- v. The outlet gas temperature of **MC-001** in degrees Fahrenheit, continuously during operation, based on a one hour period, for the corresponding date.
- vi. The mercury drained from MC-001 in pounds, monthly, for the corresponding date.
- vii. The differential pressure across **CA-001** in inches of water column, continuously during operation, based on a one hour period, for the corresponding date.
- viii. The percentage of mercury by weight of the sulfur-impregnated carbon in **CA-001** from the quarterly and monthly analysis, for the corresponding date.
- ix. The depth of the sample probe from the quarterly and monthly carbon sampling on CA-001 for the corresponding date.
- x. The date, time, and weight of each sulfur-impregnated carbon replacement for CA-001, for the corresponding date.
- xi. The date, time, and corrective action taken for an interlock shut-down, for the corresponding date.
- d. <u>Reporting</u>

Permittee will promptly report to the Director any deviations from the requirements of the Operating Permit to Construct. The report to the Director will include probable cause of all deviations and any action taken to correct deviations. For this Operating Permit to Construct, prompt is defined as submittal of a report within 15 days of said deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232 and under condition I.L. of this permit.



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Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions

B. Thermal Unit # TU 4.002 North 4,350.63 km, East 269.68 km, UTM (Zone 11)

B. System 02 – Furnace

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4.002 Melt Furnace, manufactured by State of Maine Mining Co., model number T200, serial number Not specified

1. Air Pollution Equipment

- a. Exhaust gases from **TU 4.002** shall be ducted to a control system with 100% capture consisting of:
 i. **Baghouse (BH-001)** (manufactured by Mikropul)
 - ii. Carbon Deep Bed Scrubber (CA-001) (manufactured by Scotia International of Nevada) (Shared with TU 4.001)

b. <u>Stack parameters</u>

- i. Height: 20 ft.
- ii. Diameter: 0.83 ft.
- iii. Stack temperature: 250°F
- iv. Flow: Maximum volume flow rate of 682 dry standard cubic feet per minute (dscfm).
- v. System 01 and System 02 are both ducted to CA-001 and share a common exhaust stack.

2. Operating Requirements

- a. Limitations of Operation NAC 445B.3679.3
 - i. The maximum allowable batch weight of **retorted precious metal precipitate** for **TU 4.002**, shall not exceed **0.49 ton per batch**. "Retorted precious metal precipitate" shall consist only of the following:
 - (a) Precious metal bearing material, as defined in A.2.a.i.(a)(b) of this section, that has been retorted.
 - (b) Dust collected from the baghouse and fume hood of **TU 4.002**.
 - ii. Mercury emissions from TU 4.002 shall not exceed 1.0×10^{-5} grains per dry standard cubic foot (gr/dscf).
 - iii. $TU\ 4.001$ and $TU\ 4.002$ may not operate simultaneously.
 - iv. Hours
 - (a) TU 4.002 may operate a total of 8,760 hours per calendar year.



MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions (continued)

B. Thermal Unit # TU 4.002 (continued)

- b. Work Practice Standards NAC 445B.3679.3
 - i. Furnace (**TU 4.002**)
 - (a) Only precious **metal bearing material** that has been retorted shall be fed into **TU 4.002**.
 - (b) **BH-001** shall be operated at all times during the operation of **TU 4.002** including startup and shutdown.
 - (c) The pressure differential across **BH-001** shall be maintained within 3-4 inches of water column.
 - (d) Bags in **BH-001** shall be inspected quarterly for damage or leakage.
 - ii. Carbon Scrubber (CA-001)
 - (a) CA-001 shall contain no less than 3,000 pounds of sulfur-impregnated carbon.
 - (b) The differential pressure across CA-001 shall not exceed 10 inches of water column.
 - (c) Replace the sulfur-impregnated carbon in CA-001 according to the following schedule: The sulfur-impregnated carbon in CA-001 shall be sampled within 90 days after the notification of implementation of NvMACT operation for either TU 4.001 or TU 4.002, whichever is first, as required in section I.Q above. The depth of the sample probe shall be recorded. Using this sample, the percentage of mercury by weight shall be calculated. If more than one sample is taken, calculate an average carbon loading from all samples. Sampling shall continue quarterly, at the same sample depth until 70% of carbon loading capacity is reached. Sampling of the carbon will then occur monthly until 90% of the carbon loading capacity is reached. The carbon will be replaced with an equivalent performing sulfur-impregnated carbon no later than 30 days after reaching 90% of the carbon loading capacity. The required mercury analysis shall be performed utilizing one of the following methods:
 - 1. EPA method 6020-Inductively Coupled Plasma-Mass Spectrometry;
 - 2. EPA method 7471B- Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique); or
 - 3. An alternative test method as approved in advance by the Director.
 - (d) Any sulfur-impregnated carbon replaced in **CA-001** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent performing sulfur-impregnated carbon.
 - (e) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **CA-001** shall be kept on site.

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3379.3)

a. Compliance Testing

Within 180 days of the notification of the date of implementation of NvMACT for **TU 4.002** as required in Section I.Q, the *Permittee* shall conduct and record a performance test for mercury on the exhaust stack of **TU 4.002** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR part 60 Appendix A.

b. Monitoring

The *Permittee* shall:

- i. Prior to implementation of NvMACT of **TU 4.002**, install, operate, calibrate, and maintain instrumentation to continuously measure and record the following:
 - (a) The differential pressure across **BH-001** in inches of water column.
 - (b) The differential pressure across **CA-001** in inches of water column.
- ii. Monitor the daily batch weight of retorted precious metal precipitate for TU 4.002, in tons, for each batch.
- iii. Monitor the total daily hours of operation per batch for TU 4.002, during each day of operation.
- iv. Monitor the differential pressure across BH-001 in inches of water column, continuously during each day of operation.
- v. Monitor the differential pressure across CA-001 in inches of water column, continuously during operation.
- vi. Monitor the sulfur-impregnated carbon in **CA-001** for percentage of mercury by weight, quarterly until reaching 70% of the carbon loading capacity and then monthly until reaching 90% of the carbon loading capacity.



MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Plum Mining Company, LLC Section II. Specific Operating Conditions (continued)

B. Thermal Unit # TU 4.002 (continued)

c. <u>Recordkeeping</u>

The required monitoring, established in Section B.3.b.i through vi, shall be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

- i. The calendar date of any required monitoring.
- ii. The total daily batch weight of retorted precious metal precipitate for TU 4.002 in tons, for the corresponding date.
- iii. The total daily hours of operation per batch for TU 4.002, for the corresponding date.
- iv. The differential pressure across **BH-001** in inches of water column, continuously during operating, based on a one hour period, for the corresponding date.
- v. The results of the bag inspections for BH-001, quarterly, for the corresponding date.
- vi. The differential pressure across **CA-001** in inches of water column, continuously during operation, based on a one hour period, for the corresponding date.
- vii. The percentage of mercury by weight of the sulfur-impregnated carbon in **CA-001** from the quarterly and monthly analysis, for the corresponding date.
- viii. The depth of the sample probe from the quarterly and monthly carbon sampling on CA-001 for the corresponding date.
- ix. The date, time, and weight of each sulfur-impregnated carbon replacement for CA-001, for the corresponding date.

d. Reporting

Permittee will promptly report to the Director any deviations from the requirements of the Operating Permit to Construct. The report to the Director will include probable cause of all deviations and any action taken to correct deviations. For this Operating Permit to Construct, prompt is defined as submittal of a report within 15 days of said deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232 and under condition I.L. of this permit.



Issued to: Plum Mining Company, LLC Section III. Amendments

This permit:

- 1. Is non-transferable. (NAC 445B.287.3)
- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318.5)
- 3. 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)

Signature: Issued by:	Rob Bamford Chief Bureau of Air Quality	Planning	
Phone:	(775) 687-9330	Date:	July 27, 2011
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