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

Bureau of Air Pollution Control

901 South Stewart Street, Suite 4001 • Carson City, NV 89701-5249
phone: 775-687-9349 • www.ndep.nv.gov/air

Facility ID No. A0386 *Permit No. AP1041-2256*

MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: FLORIDA CANYON MINING, INC. (HEREINAFTER REFERRED TO AS ***THE PERMITTEE***)
Mailing Address: P.O. BOX 330, IMLAY, NV 89418
General Facility Location: SECTIONS 33 - 35, T32N, R33E, MDB&M
SECTIONS 1-4, 9-15, 37 - 39, T31N, R33E, MDB&M
SECTION 35, T31 ½ N, R33E, MDB&M
SECTIONS 6, T31N, R33 ½ E, MDB&M
HA 72 - PERSHING COUNTY

Driving Directions: From Lovelock, NV, travel North on I-80 for approximately 31.9 miles, exit at Exit 138 (Humboldt), turn right onto Frontage Road and travel approximately 0.6 miles to facility.

Emission Unit List:		
A. System 01 – Tilting Crucible Furnace (Reference Class I Air Quality Operating Permit AP1041-2968) (Revised April 2026, Air Case #12425)		
TU	4.001	Tilting Crucible Furnace (Electric) (S2.003) (Manufactured by Inductotherm, Model # 1000, Serial # 96-58514-335-11)
B. System 02A – Carbon Regeneration Kiln (Drum Only) (Reference Class I Air Quality Operating Permit AP1041-2968) (Revised April 2026, Air Case #12425)		
TU	4.008	Carbon Regeneration Kiln (Drum Only) (S2.004A) (Manufactured by FLSmidth)
C. System 03 – Mercury Retorts (Reference Class I Air Quality Operating Permit AP1041-2968) (Revised April 2026, Air Case #12425)		
TU	4.004	Mercury Retort 700 (S2.009A) (Manufactured by Summit Valley, Model # FC10))
TU	4.005	Mercury Retort 500 (S2.010A) (Manufactured by Custom Equipment Corporation, Model 87-260)
D. System 04 – Solutions System (Reference Class I Air Quality Operating Permit AP1041-2968) (Revised April 2026, Air Case #12425)		
TU	4.002	Electrowinning Cell A (S2.018) (Manufactured by Summit Valley, Model # 75EC10))
TU	4.003	Electrowinning Cell B (S2.019) (Manufactured by Summit Valley)
TU	4.006	Pregnant Solution Tank (S2.021) (Manufactured by FLSmidth)
TU	4.007	Barren Solution Tank (S2.020) (Manufactured by FLSmidth)

Facility ID No. A0386 Permit No. AP1041-2256
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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. Records Retention 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. Severability NAC 445B.3365.2(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. Cause 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. Property Rights/Exclusive Privilege 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.

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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. Yearly Reporting 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 and supporting documentation (if applicable) will be submitted via the State and Local Emissions Inventory System (SLEIS) maintained by the Bureau of Air Quality Planning for all emission units/systems specified. The completed report must be submitted to the Bureau of Air Quality Planning no later than March 1 annually for the preceding calendar year.

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. E-mail to: aircompliance@ndep.nv.gov
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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Section I. General Conditions (continued)

M. Construction Requirements 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. Testing and Sampling NAC 445B.252
1. To determine compliance with NAC 445B.001 to 445B.3689, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the director may either conduct or order the owner 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 startup of the facility and at such 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 method of reference with minor changes in methodology;
   b. Approves the use of an equivalent method;
   c. Approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific stationary source is in compliance; or
   d. Waives the requirement for tests of performance because the owner or operator 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 owner or operator shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard.
4. ***The Permittee*** 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.
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 owner 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 NAC 445B.001 to 445B.3689, inclusive, and copies of these results must be provided to the director no later than 60 days after the testing or sampling, or both.

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.

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Section I. General Conditions (continued)

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.

Q. Nevada Mercury Control Program Implementation NAC 445B.3679

1. The NvMACT for **TU4.001 throughTU4.008,** 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 **TU4.004** and **TU4.005** is **July 12, 2010**.
   a. The issuance date for **TU4.001 through TU4.003, and TU4.006 through TU4.008,** each is **January 22, 2020**.
2. ***The Permittee*** shall provide the Director written notification of:
   a. The date of implementation of NvMACT for **TU4.001 through TU4.003, and TU4.006 through TU4.008,** each pursuant to NAC 445B.3679.3(a)(2)(I) postmarked within 15 days after such date (NAC 445B.3679.2(g)).

R. Annual Reporting NAC 445B.3679

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 **********

Facility ID No. A0386 Permit No. AP1041-2256
MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions

A. Emission Unit TU4.001

System 01 – Tilting Crucible Furnace		Location UTM (Zone 11, NAD 83)	
		m North	m East
TU4.001	**Tilting Crucible Furnace** (Electric) (S.2003) (Manufactured by Inductotherm, Model # 1000, Serial # 96-58514-335-11)	4,493,287	393,655

1. Air Pollution Control Equipment

a. Emissions from **TU4.001** shall be ducted to a control system with 100% capture consisting of:
   1. **Baghouse (BH-001)** *(Manufactured by FLSmidth)*
   2. **Carbon Adsorption Vessel (DS-001)** *(Manufactured by FLSmidth)*

b. Descriptive Stack Parameters
Height: 10.33 feet
Diameter: 2 feet
Temperature: 120º Fahrenheit
Exhaust gases from **TU4.001** shall have a maximum volume flow rate of approximately 10,000 actual cubic feet per minute (ACFM).

2. Operating Requirements (NAC 445B.3679.3)

a. Limitations of Operation
   1. The maximum allowable throughput of **retorted precious metal laden material** for **TU4.001** shall not exceed **0.5** ton of **retorted precious metal laden material** per any one-hour period. **Retorted precious metal laden material** is defined by
      (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, that has been retorted.
      (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.
      (c) Material containing precious metals collected from **BH-001**.
   2. Mercury emissions from **TU4.001** shall not exceed **1.0 x 10^{-5}** grains per dry standard cubic foot (gr/dscf).
   3. Hours
      (a) **TU4.001** may operate a total of **24** hours per day.

b. Work Practices
   1. Baghouse (**BH-001**)
      (a) Bags in **BH-001** shall be inspected quarterly for damage or leakage.
      (b) The differential pressure across **BH-001** shall not exceed **20** inches of water column.

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Section II. Specific Operating Conditions (continued)

A. Emission Unit TU4.001 (continued)

2. Operating Requirements (continued)

b. Work Practice Standards (continued)

2. Carbon Filter (**DS-001**)

(a) The carbon filter **DS-001** shall contain no less than **11,000** pounds of sulfur-impregnated carbon.

(b) The exhaust temperature at the inlet to the carbon filter **DS-001** shall not exceed **170° Fahrenheit**.

(c) The differential pressure across **DS-001** shall not exceed **15** inches water column.

(d) **DS-001** shall be equipped with an alarm that alerts personnel of the following alarm conditions:

(i) The exhaust temperature at the inlet of **DS-001** exceeds **160º Fahrenheit**;

(ii) The differential pressure across **DS-001** exceeds **15** inches of water column.

(e) Sample and replace the carbon in **DS-001** according to the following schedule:
Sample the carbon at the inlet and outlet of the carbon filter **DS-001** and record the depth of the sample probe within **90** days after replacement of the carbon. The sampled carbon shall be analyzed for mercury and the average percentage of mercury, by weight, shall be calculated. The loading capacity of the sulfur-impregnated carbon is **20%** by weight. A sample of carbon shall be analyzed quarterly until **50%** of the carbon loading capacity is reached. Upon reaching **50%** of the carbon loading capacity, the sampling of carbon shall occur monthly until **90%** of the carbon loading capacity is reached. The carbon in the carbon filter **DS-001** shall be replaced 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:

(i) EPA Method 6020 – Inductively Coupled Plasma-Mass Spectrometry;

(ii) EPA Method 7471B – Mercury in Solid of Semi-solid Waste (Manual Cold Vapor Technique); or

(iii) An alternative test method as approved by the Director.

(f) On an annual basis, perform a total loading analysis on the mercury removal media in **DS-001**.

(g) Any sulfur-impregnated carbon replaced in **DS-001** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent, or better performing mercury removal media.

(h) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **DS-001** shall be kept on site.

3. Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3)

a. Compliance Testing

1. Within 60 days after achieving the maximum rate of production at which **TU4.001** will be operated, but not later than 180 days of initial startup of **TU4.001**, and annually thereafter, ***the Permittee*** shall conduct and record a performance test for mercury on the exhaust stack of **TU4.001** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR Part 60 Appendix A. Each of the three test runs must collect a sample volume of **0.85** dry standard cubic meters (**30 dscf**).

2. Simultaneously, during the Method 29 compliance test, conduct and record a material assay from **System 01**. 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).

3. ***The Permittee*** shall comply with the requirements in Section I.N of this operating permit for all compliance testing.

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Section II. Specific Operating Conditions (continued)

A. Emission Unit TU4.001 (continued)

3. Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3) (continued)

b. Monitoring

The Permittee, upon issuance date of this operating permit, shall:

1. Install, operate, calibrate, and maintain instrumentation to measure and record the following:
   (a) The differential pressure across **BH-001,** in inches of water.
   (b) The exhaust temperature at the inlet of **DS-001**, in degrees Fahrenheit.
   (c) The differential pressure across **DS-001**, in inches of water.
2. Install, operate, calibrate and maintain alarms for **DS-001** for the following:
   (a) The differential pressure across **DS-001** exceeding **15** inches of water column.
   (b) The exhaust temperature at the inlet of **DS-001** exceeding **160º** Fahrenheit.
3. Monitor the daily batch weight of **retorted precious metal laden material**, in tons, for each batch.
4. Monitor the daily hours for each batch, during each day of operation.
5. Monitor the differential pressure across **BH-001**, once per shift during operation of **TU4.001**.
6. Monitor the inlet exhaust temperature for the carbon filter **DS-001,** once per shift during operation of **TU4.001**.
7. Monitor the differential pressure of **DS-001,** once per shift during operation of **TU4.001**.
8. Monitor the percentage of mercury, by weight, on the carbon in the carbon filter **DS-001** quarterly until reaching 50% of the loading capacity, and then monthly until reaching 90% of the loading capacity.

c. Recordkeeping

The required monitoring established in Section A.4.b above, shall be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

1. The calendar date of any required monitoring.
2. The hourly throughput of **retorted precious metal laden material**, in tons, for the corresponding date. Hourly throughput shall be calculated from daily monitored batch weight and batch time data.
3. The total daily hours of operation for the corresponding date.
4. The results of the quarterly inspection of **BH-001**.
5. The differential pressure across **BH-001**, for each shift on the corresponding date.
6. The inlet exhaust temperature entering **DS-001**, for each shift on the corresponding date.
7. The differential pressure across **DS-001**, for each shift on the corresponding date.
8. The percentage of mercury by weight in **DS-001**, for the corresponding date.
9. The depth of the sample location in **DS-001** from the mercury analysis, for the corresponding date.
10. The date, time, and weight of each sulfur-impregnated carbon replacement for **DS-001**, for the corresponding date.

d. Reporting

1. The date, time and description of any alarm event and corresponding corrective action.
2. ***The Permittee*** shall promptly report to the Director any emissions and or throughput exceedances from **System 01**. The report to the Director shall include probable cause and any action taken to correct the exceedance. 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 operating permit.

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Section II. Specific Operating Conditions

B. Emission Unit TU4.008

System 02A – Carbon Regeneration Kiln (Drum Only)		Location UTM (Zone 11, NAD 83)	
		m North	m East
TU4.008	**Carbon Regeneration Kiln** (Drum Only) (S.2004A) (Manufactured by FLSmidth)	4,493,322	393,657

1. Air Pollution Control Equipment

a. Emissions from **TU4.008** shall be ducted to a control system with 100% capture consisting of:
   1. **Exhaust Demister Vessel (EDV-001)** *(Manufactured by FLSmidth)*
   2. **Carbon Adsorption Vessel (DS-003)** *(Manufactured by FLSmidth)*

b. Descriptive Stack Parameters
   Height: 19.6 feet
   Diameter: 1.167 feet
   Temperature: 120º Fahrenheit
   Exhaust gases from **TU4.008** shall have a maximum volume flow rate of approximately 3,091 actual cubic feet per minute (ACFM).

2. Operating Requirements (NAC 445B.3679.3)

a. Limitations of Operation
   1. The maximum allowable throughput of **carbon** for **TU4.008** shall not exceed **0.275** ton per any one-hour period.
   2. Mercury emissions from **TU4.008** shall not exceed **1.0 x 10^{-4}** grains per dry standard cubic foot (gr/dscf).
   3. Hours
      (a) **TU4.008** may operate a total of **24** hours per day.

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Section II. Specific Operating Conditions (continued)

B. Emission Unit TU4.008 (continued)

2. Operating Requirements (continued)

b. Work Practice Standards (continued)

1. Carbon Filter (**DS-003**)

(a) The carbon filter **DS-003** shall contain no less than **8,462** pounds of sulfur-impregnated carbon.

(b) The exhaust temperature at the inlet to the carbon filter **DS-003** shall not exceed **170°** Fahrenheit.

(c) The differential pressure across **DS-003** shall not exceed **10.0** inches water column.

(d) **DS-003** shall be equipped with an alarm that alerts personnel of the following alarm conditions:

(i) The exhaust temperature at the inlet of **DS-003** exceeds **160º** Fahrenheit;

(ii) The differential pressure across **DS-003** exceeds **8.0** inches of water column.

(e) Sample and replace the carbon in **DS-003** according to the following schedule:
Sample the carbon at the inlet and outlet of the carbon filter **DS-003** and record the depth of the sample probe within **90** days after replacement of the carbon. The sampled carbon shall be analyzed for mercury and the average percentage of mercury, by weight, shall be calculated. The loading capacity of the sulfur-impregnated carbon is **20%** by weight. A sample of carbon shall be analyzed quarterly until **50%** of the carbon loading capacity is reached. Upon reaching **50%** of the carbon loading capacity, the sampling of carbon shall occur monthly until **90%** of the carbon loading capacity is reached. The carbon in the carbon filter **DS-003** shall be replaced 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:

(i) EPA Method 6020 – Inductively Coupled Plasma-Mass Spectrometry;

(ii) EPA Method 7471B – Mercury in Solid of Semi-solid Waste (Manual Cold Vapor Technique); or

(iii) An alternative test method as approved by the Director.

(f) On an annual basis, perform a total loading analysis on the mercury removal media in **DS-003**.

(g) Any sulfur-impregnated carbon replaced in **DS-003** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent, or better performing mercury removal media.

(h) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **DS-003** shall be kept on site.

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3)

a. Compliance Testing

1. Within 60 days after achieving the maximum rate of production at which **TU4.008** will be operated, but not later than 180 days of initial startup of **TU4.008**, and annually thereafter, ***the Permittee*** shall conduct and record a performance test for mercury on the exhaust stack of **TU4.008** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR Part 60 Appendix A. Each of the three test runs must collect a sample volume of **0.85** dry standard cubic meters (**30 dscf**).

2. Simultaneously, during the Method 29 compliance test, conduct and record a material assay from **System 02A**. 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).

3. ***The Permittee*** shall comply with the requirements in Section I.N of this operating permit for all compliance testing.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

B. Emission Unit TU4.008 (continued)

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3) (continued)

b. Monitoring

The Permittee, upon issuance date of this operating permit, shall:

1. Install, operate, calibrate, and maintain instrumentation to measure the following:
   (a) The differential pressure across **DS-003,** in inches of water.
   (b) The exhaust temperature at the inlet of **DS-003**, in degrees Fahrenheit.
2. Install, operate, calibrate and maintain alarms for **DS-003** for the following:
   (a) The differential pressure across **DS-003** exceeding **8.0** inches of water column.
   (b) The exhaust temperature at the inlet of **DS-003** exceeding **160º** Fahrenheit.
3. Monitor the daily batch weight of **carbon**, in tons, for each batch.
4. Monitor the daily hours for each batch, during each day of operation.
5. Monitor the exhaust temperature at the inlet to **DS-003** ,once per shift during operation of **TU4.008**.
6. Monitor the differential pressure of **DS-003,** once per shift during operation of **TU4.008**.
7. Monitor the percentage of mercury, by weight, on the carbon in the carbon filter **DS-003** quarterly until reaching 50% of the loading capacity, and then monthly until reaching 90% of the loading capacity.

c. Recordkeeping

The required monitoring established in Section B.4.b above, shall be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

1. The calendar date of any required monitoring.
2. The hourly throughput of **carbon**, in tons, for the corresponding date. Hourly throughput shall be calculated from daily monitored batch weight and batch time data.
3. The total daily hours of operation for the corresponding date.
4. The exhaust temperature at the inlet of **DS-003** for each shift on the corresponding date.
5. The differential pressure across **DS-003** for each shift on the corresponding date.
6. The percentage of mercury by weight in **DS-003**, for the corresponding date.
7. The depth of the sample location in **DS-003,** from the mercury analysis, for the corresponding date.
8. The date, time, and weight of each sulfur-impregnated carbon replacement for **DS-003**, for the corresponding date.
9. The date, time and corresponding corrective actions of any alarm event.

d. Reporting

1. The date, time and description of any alarm event and corresponding corrective action.
2. ***The Permittee*** shall promptly report to the Director any emissions and or throughput exceedances from **System 02A**. The report to the Director shall include probable cause and any action taken to correct the exceedance. 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 operating permit.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

C. Emission Units #TU4.004 and TU4.005

System 03 – Mercury Retorts		Location UTM (Zone 11, NAD 83)	
		m North	m East
TU4.004	**Retort 700** (S.2009A) (Manufactured by Summit Valley Equip., Model FC 10)	4,493,298	393,666
TU4.005	**Retort 500** (S.2010A) (Manufactured by Custom Equip. Corp., Model 87-260)	4,493,301	393,669

1. Air Pollution Equipment

a. Exhaust gases from **TU4.004** and **TU4.005**, each shall be ducted with 100% capture to the following in series:
   1. **Mercury Condenser (CO-001)** *(manufactured by FCMI)*
   2. **Demister Vessel (EDV-003)** *(manufactured by FCMI)*
   3. **Carbon Filter Columns with Sulfur-Impregnated Carbon (CF-001)** *(primary) (set of four carbon columns operating in parallel) (manufactured by FCMI)*
   4. **Carbon Filter Columns with Sulfur-Impregnated Carbon (CF-002) with HEPA filter** *(secondary) (set of four carbon columns operating in parallel) (manufactured by FCMI)*
   5. **Demister Vessel (EDV-002)** *(manufactured by FLSmidth)*
   6. **Carbon Adsorption Vessel (DS-002)** *(manufactured by FLSmidth)*

b. Descriptive Stack parameters
Height: 10.33 ft.
Diameter: 0.833 ft.
Stack temperature: 130º F
Exhaust gases from **TU4.004 – TU4.005** shall have a maximum volume flow rate of approximately 1,500 actual cubic feet per minute (ACFM).
Units **TU4.002 – TU4.003** (System 04), **TU4.004 - TU4.005** (System 03)**, and TU4.006 TU4.007** (System 04) are ducted to a common stack.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

C. Emission Units #TU4.004 and TU4.005 (continued)

2. Operating Requirements (NAC 445B.3679.3)

a. Limitations of Operation

1. The maximum allowable throughput of **precious metal laden precipitate** for **TU4.004** will not exceed **700** pounds of **precious metal laden precipitate** per batch, nor more than **128** tons per calendar year. "Precious metal laden precipitate is defined by:
   (a) Material loaded with precious metal such as gold and silver, along with various other metals that are 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.
2. The maximum allowable throughput of **precious metal laden material** for **TU4.005** will not exceed **500** pounds of **precious metal laden material** per batch, nor more than **91** tons per calendar year. Precious metal laden material is defined above in C.3.a.(1)(a) and C.3.a.(1)(b).
3. Mercury emissions from **TU4.004** shall not exceed **1.0×10^{-4}** grains per dry standard cubic foot (gr/dscf).
4. Mercury emissions from **TU4.005** shall not exceed **1.0×10^{-4}** grains per dry standard cubic foot (gr/dscf).
5. Hours
   (a) **TU4.004** and **TU4.005** each, may operate a total of **24** hours per day.
   (b) **TU4.004** and **TU4.005** shall not operate simultaneously.

b. Work Practices

1. Retort (**TU4.004** and **TU4.005**)
   (a) During heating, the vacuum pressure for the retort will be above **0.5** inches of mercury (inHg).
   (b) **TU4.004 and TU4.005**, each, shall automatically shut off, per interlock, if the vacuum pressure falls below **0.5** inches of mercury operating range.
   (c) **TU4.004 and TU4.005**, each, shall automatically shut off, per interlock, if the temperature in the retort is above **1,200°F**.
2. Mercury Condenser **(CO-001)**
   (a) The water flow rate for **CO-001** shall not be less than **7.0** gallons per minute (gpm).
   (b) The exhaust temperature exiting **CO-001** shall not exceed **110°F.**
   (c) Chiller water temperature will be maintained below **100°F**.
   (d) Condensed mercury, collected from the condenser, shall be collected monthly.
   (e) **TU4.004 and TU4.005**, each, shall automatically shut off, per interlock, if the exhaust gas temperature from **CO-001** is above **110°F**.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

C. Emission Units #TU4.004 and TU4.005 (continued)

2. Operating Requirements (NAC 445B.3679.3) (continued)

3. Carbon Filter Columns with Sulfur-Impregnated Carbon **(CF-001** and **CF-002)**
   (a) The carbon filter columns **CF-001** and **CF-002**, each, will contain no less than **225** pounds of sulfur impregnated carbon per individual column.
   (b) Sample and replace the carbon in **CF-001** and **CF-002** according to the following schedule:
      i. Conduct an initial sampling of the sulfur-impregnated carbon every calendar quarter. A representative sample shall be taken at the sample port location required in Section II.C.4.a.iii. and analyzed. The depth of the sample location shall be recorded. Using this sample the percentage of mercury by weight shall be calculated. Sampling will continue quarterly, at the same sample depth location, until 50 % of the 20% by weight of the carbon loading capacity, as specified by the manufacturer, is reached. Upon reaching 50% of the 20% by weight of the carbon loading capacity, sampling of the carbon will occur monthly until 90% of the 20% by weight 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 20% by weight of the carbon loading capacity. The required mercury analysis shall be performed utilizing one of the following methods:
         a. EPA method 6020-Inductively Coupled Plasma-Mass Spectrometry;
         b. EPA method 7471B- Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique); or
         c. An alternative test method as approved by the Director.
      (ii) On an annual basis, perform a total loading analysis on the mercury removal media in **CF-001** and **CF-002**.
   (c) Any sulfur-impregnated carbon replaced in **CF-001** and **CF-002** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent, or better performing mercury removal media.
   (d) The original manufacturer's design specifications for the sulfur impregnated carbon used in **CF-001** and **CF-002** shall be kept on site.
4. Carbon Adsorption Vessel **(DS-002)**
   (a) The carbon filter **(DS-002)** shall contain no less than 3,950 pounds of sulfur-impregnated carbon.
   (b) The exhaust temperature at the inlet to the carbon filter **DS-002** shall not exceed **170° Fahrenheit**.
   (c) The differential pressure across **DS-002** shall not exceed **8** inches water column.
   (d) **DS-002** shall be equipped with an alarm that alerts personnel of the following alarm conditions:
      (i) The exhaust temperature at the inlet of **DS-002** exceeds **160º** Fahrenheit;
      (ii) The differential pressure across **DS-002** exceeds **7.0** inches of water column.
   (e) Sample and replace the carbon in **DS-002** according to the following schedule:
   Sample the carbon at the inlet and outlet of the carbon filter **DS-002** and record the depth of the sample probe within **90** days after replacement of the carbon. The sampled carbon shall be analyzed for mercury and the average percentage of mercury, by weight, shall be calculated. The loading capacity of the sulfur-impregnated carbon is **20%** by weight. A sample of carbon shall be analyzed quarterly until **50%** of the carbon loading capacity is reached. Upon reaching **50%** of the carbon loading capacity, the sampling of carbon shall occur monthly until **90%** of the carbon loading capacity is reached. The carbon in the carbon filter **DS-002** shall be replaced 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:
      (i) EPA Method 6020 – Inductively Coupled Plasma-Mass Spectrometry;
      (ii) EPA Method 7471B – Mercury in Solid of Semi-solid Waste (Manual Cold Vapor Technique); or
      (iii) An alternative test method as approved by the Director.
   (f) On an annual basis, perform a total loading analysis on the mercury removal media in **DS-002**.
   (g) Any sulfur-impregnated carbon replaced in **DS-002** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent, or better performing mercury removal media.
   (h) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **DS-002** shall be kept on site.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

C. Emission Units #TU4.004 and TU4.005 (continued)

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3)

a. Compliance Testing

1. Within 60 days after achieving the maximum rate of production at which **TU4.004 and TU4.005** will be operated, but not later than 180 days of initial startup of **TU4.004 and TU4.005**, and annually thereafter, ***the Permittee*** shall conduct and record a performance test for mercury on the exhaust stack of **TU4.004 and TU4.005** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR Part 60 Appendix A. Each of the three test runs must collect a sample volume of **0.85** dry standard cubic meters (**30 dscf**).
2. Simultaneously, during the Method 29 compliance test, conduct and record a material assay from **System 03**. 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).
3. ***The Permittee*** shall comply with the requirements in Section I.N of this operating permit for all compliance testing.
4. System 03 (**TU4.004** and **TU4.005**) and System 04 (**TU4.002**, **TU4.003**, **TU4.006**, and **TU4.007**) shall not operate simultaneously during compliance testing of System 03 (**TU4.004** and **TU4.005**).

b. Monitoring

The ***Permittee*** shall:

1. Install, operate, calibrate, and maintain instrumentation to measure the following:
   (a) The vacuum pressure of **TU4.004** and **TU4.005,** in inHg.
   (b) The temperature of **TU4.004** and **TU4.005**, in degrees Fahrenheit.
   (c) The water flow rate to **CO-001**, in gallons per minute.
   (d) The temperature of the exhaust gas exiting **CO-001**, in degrees Fahrenheit.
2. Install and maintain one sample port on **CF-001** and **CF-002**, each, on one center column, mid-height on column.
3. Install, operate, calibrate, and maintain an outlet gas temperature interlock that will shut off the retort heating element if the outlet gas temperature from **CO-001** reaches **110º F**.
4. Install, operate, calibrate, and maintain a vacuum pressure interlock that will shut off the retort's heating element if the vacuum pressure in **TU4.004** and **TU4.005**, each, are less than **0.5** inches of mercury.
5. Monitor the peak temperature of **TU4.004** and **TU4.005**, each, on a daily basis while operating.
6. Monitor the batch weight of precious metal laden precipitate for **TU4.004** and **TU4.005**, in pounds, each, on a daily basis while operating.
7. Monitor the batch hours of operation per batch for **TU4.004** and **TU4.005**, each, on a daily while operating.
8. Monitor the vacuum pressure of **TU4.004** and **TU4.005**, each, once per shit on a daily basis while operating at top temperature stage.
9. Monitor the amount of mercury drained from **CO-001**.
10. Monitor the amount of sulfur impregnated carbon replaced in **CF-001** and **CF-002**, each.
11. Monitor the water flow rate for **CO-001** once per shift while **TU4.004** and **TU4.005**, each, are operating at top temperature stage.
12. Monitor the exhaust gas temperature from **CO-001** once per shift while **TU4.004** and **TU4.005**, each, are operating at top temperature stage.
13. Monitor **CF-001** and **CF-002** for percentage of mercury by weight, quarterly until reaching **50** percent capacity and then monthly until reaching **90** percent capacity.
14. Monitor the exhaust temperature at the inlet of **DS-002**, once per shift while **TU4.004** and **TU4.005**, each are operating at top temperature stage.
15. Monitor the differential pressure across **DS-002**, once per shift while **TU4.004** and **TU4.005**, each are operating at top temperature stage.
16. Monitor **DS-002** for the percentage of mercury by weight, quarterly until reaching **50** percent capacity and then monthly until reaching **90** percent capacity.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

C. Emission Units #TU4.004 and TU4.005 (continued)

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3) (continued)

c. Recordkeeping

The required monitoring established in Section C.4.b. above will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

1. The calendar date of any required monitoring.
2. The total batch weight of precious metal laden precipitate in pounds, for the corresponding date.
3. The total daily batch hours of operation per batch, for the corresponding date.
4. The peak temperature for **TU4.004** and **TU4.005**, each, for the corresponding date.
5. The vacuum pressure for **TU4.004** and **TU4.005**, each, for each shift on the corresponding date.
6. The amount of mercury, in pounds recovered from **CO-001**, for the corresponding date.
7. The water flow rate for **CO-001**, for each shift on the corresponding date.
8. The exhaust gas temperature from **CO-001**, for each shift on the corresponding date.
9. The peak temperature of **TU4.004** and **TU4.005**, each, for the corresponding date.
10. Percentage of mercury loading by weight for **CF-001** and **CF-002**, each, for the corresponding date.
11. The sample depth used to determine the percentage of mercury loading in **CF-001** and **CF-002**, each, for the corresponding date.
12. The date, time, and weight of each sulfur impregnated carbon replaced for **CF-001** and **CF-002**, for the corresponding date.
13. The percentage mercury by weight in **DS-002**, for the corresponding date.
14. The exhaust temperature at the inlet of **DS-002**, for each shift on the corresponding date.
15. The differential pressure across **DS-002**, for each shift on the corresponding date.
16. The depth of sample used to determine the percentage of mercury loading in **DS-002** for the corresponding date.
17. The date, time, and weight of each sulfur-impregnated carbon replacement for **DS-002**, for the corresponding date.
18. The time and corrective action performed for any interlock event, for the corresponding date.

d. Reporting

1. The date, time and description of any interlock or alarm event and corresponding corrective action.
2. ***The Permittee*** shall promptly report to the Director any emissions and or throughput exceedances from **System 03**. The report to the Director shall include probable cause and any action taken to correct the exceedance. 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 operating permit.
3. ***The Permittee*** will report annually to the Director the amount of mercury collected from the Mercury Condenser **(CO-001)**, in pounds for the reporting year.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions

D. Emission Units TU4.002 – TU4.003 and TU4.006 – TU4.007

System 04 – Solutions System		Location UTM (Zone 11, NAD 83)	
		m North	m East
TU4.002	**Electrowinning Cell A** (S.2018) (Manufactured by Summit Valley, Model # 75EC10)	4,493,300	393,651
TU4.003	**Electrowinning Cell B** (S.2019) (Manufactured by Summit Valley)	4,493,270	393,648
TU4.006	**Pregnant Solution Tank** (S2.021) (Manufactured by FLSmidth)	4,493,313	393,644
TU4.007	**Barren Solution Tank** (S2.020) (Manufactured by FLSmidth)	4,493,310	393,648

1. **Air Pollution Control Equipment**
   a. Emissions from **TU4.002 – TU4.003** and **TU4.006 – TU4.007** shall be ducted to a control system with 100% capture consisting of:
      1. **Exhaust Demister Vessel (EDV-002)** *(Manufactured by FLSmidth)*
      2. **Carbon Adsorption Vessel (DS-002)** *(Manufactured by FLSmidth)*

   b. Descriptive Stack Parameters
   Height: 10.33 feet
   Diameter: 0.833 feet
   Temperature: 130º Fahrenheit
   Exhaust gases from **TU4.002 – TU4.003** and **TU4.006 – TU4.007** shall have a maximum volume flow rate of approximately 1,500 actual cubic feet per minute (ACFM).
   Units **TU4.002 – TU4.003** (System 04), **TU4.004 - TU4.005** (System 03)**, and TU4.006 TU4.007** (System 04) are ducted to a common exhaust stack.

2. **Operating Requirements (NAC 445B.3679.3)**
   a. Limitations of Operation
      (1) The maximum allowable throughput of **precious metal bearing solution** for **TU4.002** and **TU4.003,** each shall not exceed **60 gallons per minute.**
      (2) The maximum allowable throughput of **precious metal bearing solution** for **TU4.006** and **TU4.007,** each shall not exceed **120 gallons per minute.**
      (3) Mercury emissions from **TU4.002 – TU4.003** and **TU4.006 – TU4.007**, combined shall not exceed **5.0 x 10^{-5}** grains per dry standard cubic foot (gr/dscf).
      (4) Hours
         (a) **TU4.002 – TU4.003** and **TU4.006 – TU4.007**, each, may operate **24** hours per day.

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

D. Emission Units TU4.002 – TU4.003 and TU4.006 – TU4.007 (continued)

2. Operating Requirements (continued)

b. Work Practice Standards

(1) Electrowinning Cells A and B (**TU4.002** and **TU4.003**)

(a) Lids for **TU4.002 and TU4.003,** each shall be closed during operation.

(2) Pregnant and Barren Solution Tanks (**TU4.006** and **TU4.007**)

(a) **TU4.006** and **TU4.007** shall be inspected quarterly for evidence of corrosion or leaking.

(3) Carbon Adsorption Vessel (**DS-002**)

(b) The carbon filter **DS-002** shall contain no less than **3,950** pounds of sulfur-impregnated carbon.

(c) The exhaust temperature at the inlet to the carbon filter **DS-002** shall not exceed **170° Fahrenheit**.

(d) The differential pressure across **DS-002** shall not exceed **8.0** inches water column.

(e) **DS-002** shall be equipped with an alarm that alerts personnel of the following alarm conditions:

(i) The exhaust temperature at the inlet of **DS-002** exceeds **160º** Fahrenheit;

(ii) The differential pressure across **DS-002** exceeds **7.0** inches of water column.

(f) Sample and replace the carbon in **DS-002** according to the following schedule:
Sample the carbon at the inlet and outlet of the carbon filter **DS-002** and record the depth of the sample probe within **90** days after replacement of the carbon. The sampled carbon shall be analyzed for mercury and the average percentage of mercury, by weight, shall be calculated. The loading capacity of the sulfur-impregnated carbon is **20%** by weight. A sample of carbon shall be analyzed quarterly until **50%** of the carbon loading capacity is reached. Upon reaching **50%** of the carbon loading capacity, the sampling of carbon shall occur monthly until **90%** of the carbon loading capacity is reached. The carbon in the carbon filter **DS-002** shall be replaced 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:

(i) EPA Method 6020 – Inductively Coupled Plasma-Mass Spectrometry;

(ii) EPA Method 7471B – Mercury in Solid of Semi-solid Waste (Manual Cold Vapor Technique); or

(iii) An alternative test method as approved by the Director.

(g) On an annual basis, perform a total loading analysis on the mercury removal media in **DS-002**.

(h) Any sulfur-impregnated carbon replaced in **DS-002** shall be replaced with only the original manufacturer's design specification sulfur-impregnated carbon or with equivalent, or better performing mercury removal media.

(i) The original manufacturer's design specifications for the sulfur-impregnated carbon used in **DS-002** shall be kept on site.

3. Compliance Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3)

a. Compliance Testing

(1) Within 60 days after achieving the maximum rate of production at which **TU4.002 – TU4.003** and **TU4.006 – TU4.007,** will be operated, but not later than 180 days of initial startup of **TU4.002 – TU4.003** and **TU4.006 – TU4.007**, and annually thereafter, ***the Permittee*** shall conduct and record a performance test for mercury on the exhaust stack of **TU4.002 – TU4.003** and **TU4.006 – TU4.007** consisting of three valid runs utilizing US EPA Method 29 of 40 CFR Part 60 Appendix A. Each of the three test runs must collect a sample volume of **0.85** dry standard cubic meters (**30 dscf**).

(2) Simultaneously, during the Method 29 compliance test, conduct and record a material assay from **System 04**. 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).

(3) ***The Permittee*** shall comply with the requirements in Section I.N of this operating permit for all compliance testing.

(4) System 03 (**TU4.004** and **TU4.005**) and System 04 (**TU4.002**, **TU4.003**, **TU4.006**, and **TU4.007**) shall not operate simultaneously during compliance testing of System 04 (**TU4.002**, **TU4.003**, **TU4.006**, and **TU4.007**).

Issued to: Florida Canyon Mining, Inc.

Section II. Specific Operating Conditions (continued)

D. Emission Units TU4.002 – TU4.003 and TU4.006 – TU4.007 (continued)

3. Testing, Monitoring, Recordkeeping and Reporting (NAC 445B.3679.3) (continued)

b. Monitoring

The Permittee, upon issuance date of this operating permit, shall:

1. Install, operate, calibrate, and maintain instrumentation to measure the following:
   (a) The differential pressure across **DS-002,** in inches of water.
   (b) The exhaust temperature at the inlet of **DS-002**, in degrees Fahrenheit.
2. Install, operate, calibrate and maintain alarms for **DS-002** for the following:
   (a) The differential pressure across **DS-002** exceeding **7.0** inches of water column.
   (b) The exhaust temperature at the inlet of **DS-002** exceeding **160º** Fahrenheit.
3. Monitor the throughput rate of process bearing solution in gallons per minute for **TU4.002 – TU4.003** and **TU4.006 – TU4.007**, each, once per day.
4. Monitor the hours of operation for **TU4.002 – TU4.003** and **TU4.006 – TU4.007**, each, on a daily basis.
5. Monitor the exhaust temperature at the inlet to **DS-002,** once per shift during operation of **TU4.002 – TU4.003** and **TU4.006 – TU4.007**.
6. Monitor the differential pressure of **DS-002,** once per shift during operation of **TU4.002 – TU4.003** and **TU4.006 – TU4.007**.
7. Monitor the percentage of mercury, by weight, on the carbon in the carbon filter **DS-002** quarterly until reaching 50% of the loading capacity, and then monthly until reaching 90% of the loading capacity.

c. Recordkeeping

The required monitoring established in Section D.4.b above, shall be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

1. The calendar date of any required monitoring.
2. The total daily throughput of precious metal bearing solution, in gallons, for **TU4.002 – TU4.003**, for the corresponding date.
3. The total daily hours of operation for **TU4.002** and **TU4.003**, for the corresponding date.
4. The total daily throughput of precious metal bearing solution, in gallons, for **TU4.006** and **TU4.007**, for the corresponding date.
5. The total daily hours of operation for **TU4.006** and **TU4.007**, for the corresponding date.
6. The exhaust temperature at the inlet of **DS-002**, for each shift on the corresponding date.
7. The differential pressure across **DS-002**, for each shift on the corresponding date.
8. The percentage of mercury by weight in **DS-002**, for the corresponding date.
9. The depth of the sample location in **DS-002** from the mercury analysis, for the corresponding date.
10. The date, time, and weight of each sulfur-impregnated carbon replacement for **DS-002**, for the corresponding date.
11. The date, time and corresponding corrective actions of any alarm event.

d. Reporting

(1) The date, time and description of any alarm event and corresponding corrective action.
(2) ***The Permittee*** shall promptly report to the Director any emissions and or throughput exceedances from **System 04**. The report to the Director shall include probable cause and any action taken to correct the exceedance. 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 operating permit.

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

Facility ID No. A0386 Permit No. AP1041-2256
MERCURY OPERATING PERMIT TO CONSTRUCT: PHASE 2

Issued to: Florida Canyon Mining, Inc.

Section III. Amendments

December 2019 – KM: Air Case #10239; MOPTC Revision addresses removal of furnace, electrowinning cells, pregnant and barren tanks from De Minimis Designation back to the Phase-2 MOPTC, with appropriate mercury controls. Work practices were revised accordingly. System 02A is revising the previously issued Phase-2 MOPTC for the carbon regeneration kiln.

June 2026 – RC: Air Case #12425; MOPTC Revision includes updates to the Monitoring Plan for the Tilting Crucible Furnace (System 01, TU4.001), the Carbon Regeneration Kiln (System 2A, TU4.008), the Mercury Retorts (System 03, TU4.004 and TU4.005), and the Electrowinning Circuit (System 04, TU4.002, TU4.003, TU4.006, and TU4.007). This MOPTC Revision also adds additional components to the control systems for the Mercury Retorts (System 03), including a Demister Vessel, a HEPA filter, and ducting to connect the System 03 exhaust stream to the System 04 mercury abatement control systems. Stack parameters for System 03 are therefore updated to match the System 04 stack parameters.

This permit:

1. **Is non-transferable (NAC 445B.287.3).**
2. **Shall 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: Tanya Soleta, P.E.
Supervisor, Permitting Branch
Bureau of Air Pollution Control

Phone: (775) 687-9536 Date: _____

KM 12/2019 RC 06/2026