

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005**

**Permit No. AP1041-0739.02**

**CLASS I AIR QUALITY OPERATING PERMIT  
GENERAL REQUIREMENTS**

**Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee**

*Emission Unit List (continued)*

**DI. System 108 – Roaster Sulfur Prill Addition System**

PF 1.491 Truck unloading to Grizzly

**DJ. System 109 – Removed from Permit on January 4, 2011**

**DK. System 110 – Roaster Sulfur Prill Addition System**

PF 1.493 Grizzly discharge to Truck Unloading Conveyor

**DL. System 111 – Roaster Sulfur Prill Addition System**

PF 1.494 Truck Unloading Conveyor transfer to Main Conveyor

**DM. System 112 – Roaster Sulfur Prill Addition System**

PF 1.498 Main Conveyor transfer to Sulfur Prill Silo

PF 1.495.1 Sulfur Prill Silo discharge to South Roaster Conveyor

PF 1.495.2 Sulfur Prill Silo discharge to North Roaster Conveyor

**DN. System 113 – Alternate Roaster Sulfur Prill Addition System**

PF 1.496 Roaster #1 Sulfur Feed Hopper

PF 1.497 Roaster #2 Sulfur Feed Hopper

**DO. System 114 - Autoclave Circuit, Alternate Operating Scenario to System 66 (emission units S2.018, S2.019, S2.020)**

S 2.321 Autoclave #4

S 2.322 Autoclave #5

S 2.323 Autoclave #6

**DP. System 115 – Ancillary Autoclave Processes: Scrubber Water Cooling Tower**

S 2.324 Scrubber Water Cooling Tower

**DQ. System 116 – Roaster Sulfur Prill Addition System**

PF 1.499 South Roaster Conveyor transfer to South Hopper

PF 1.500 North Roaster Conveyor transfer to North Hopper

**DR. System 133A – Paste Backfill Plant: Cement Silo Loading – Added January XX, 2012**

S 2.350 Paste Backfill Plant: 250-Ton Cement Silo - Loading

**DS. System 133B – Paste Backfill Plant: Flyash Silo Loading – Added January XX, 2012**

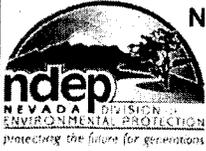
S 2.351 Paste Backfill Plant: 250-Ton Flyash Silo - Loading

**DT. System 134 – Paste Backfill Plant Material Transfers – Added January XX, 2012**

S 2.352.1 Cement Silo Discharge to Screw Conveyor

S 2.352.2 Flyash Silo Discharge to Screw Conveyor

S 2.352.3 Screw Conveyor Discharge



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**Emission Unit List (continued)**

**DU. System 135 – Paste Backfill Plant Emergency Diesel Generator – Added January XX, 2012**

S 2.353 Emergency Diesel Generator – 1,500 kW (2,012 HP) – Model Year 2010

**DV. System 136 – Rodeo Shotcrete Silo #2 – Added January XX, 2012**

S 2.354 110-Ton Rodeo Shotcrete Silo #2 – Loading (pneumatic or bucket elevator)

PF 1.510 110-Ton Rodeo Shotcrete Silo #2 – Discharge to Conveyor

PF 1.511 110-Ton Rodeo Shotcrete Silo #2 – Conveyor Discharge

**DW. System 137 – Rodeo Shotcrete Loadout Station #2 – Added January XX, 2012**

PF 1.512 Delivery Truck Discharge to Screw Conveyor

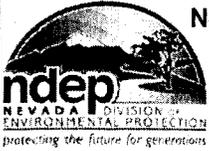
PF 1.513 Screw Conveyor Discharge

**DX. System 138 – Fuel Bay Gasoline Dispensing Facilities (GDFs) – Added January XX, 2012**

S 2.355 Contractor Fuel Bay Gasoline Storage Tank – 8,000 Gallon Capacity

S 2.356 Leducor Fuel Bay Gasoline Storage Tank – 500-Gallon Capacity

**End of Emission Unit List**



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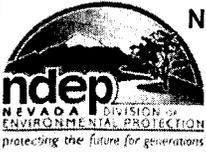
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**Section II. General Construction Conditions**

- A. NAC 445B.250 Notification of planned construction or reconstruction. (*Federally Enforceable SIP Requirement*)  
Any owner or operator subject to the provisions of NAC 445B.001 to 4445B.3689, inclusive, shall furnish the Director written notification of:
1. The date that construction or reconstruction of S2.208.19, S2.208.20, S2.208.21, S2.208.22, S2.209.1, S2.209.2, S2.067.4, S2.067.5, S2.321 through S2.324, PF1.491, and PF1.493 through PF1.500 is commenced, postmarked no later than 30 days after such date. This requirement does not apply in the case of mass-produced facilities which are purchased in completed form.
  2. The anticipated date of initial start-up of S2.208.19, S2.208.20, S2.208.21, S2.208.22, S2.209.1, S2.209.2, S2.067.4, S2.067.5, S2.321 through S2.324, PF1.491, and PF1.493 through PF1.500, postmarked not more than 60 days and not less than 30 days before such date.
  3. The actual date of initial start-up of S2.208.19, S2.208.20, S2.208.21, S2.208.22, S2.209.1, S2.209.2, S2.067.4, S2.067.5, S2.321 through S2.324, PF1.491, and PF1.493 through PF1.500, 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.1.
- B. Notification and Recordkeeping (40 CFR 60.7, NAC 445B.250, NAC 445B.346.2)-Added January XX, 2012  
The Permittee shall provide the Director the following:
1. A notification of the date of construction of S2.350 – S2.354 and PF1.510 – PF1.513 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 (40 CFR 60.7(a)(1); NAC 445B.250.1)
  2. A notification of the anticipated date of initial startup of S2.350 – S2.354 and PF1.510 – PF1.513, postmarked not more than 60 days nor less than 30 days prior to such date (NAC 445B.250.2).
  3. A notification of the actual date of initial startup of S2.350 – S2.354 and PF1.510 – PF1.513, postmarked within 15 days after such date (40 CFR 60.7(a)(3); NAC 445B.250.3).
  4. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice (40 CFR 60.7(a)(4)).
- C. NAC 445B.3366 Part 70 Program  
Expiration  
This Operating Permit expires if construction is not commenced within 18 months after the date of issuance thereof or construction of the facility is delayed for 18 months after initiated.

\*\*\*\*\***End of General Construction Conditions**\*\*\*\*\*



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**GENERAL REQUIREMENTS**

**Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee**

**Section IIA. Specific Construction Conditions (continued)**

**G. Initial Performance Tests for Emission Units S2.350 – S2.354 and PF1.510 – PF1.513 – Added January XX, 2012**  
NAC 445B.3405 (NAC 445B.316); NAC 445B.252 Part 70 Program

1. Emissions from S2.350 – S2.354 and PF1.510 – PF1.513 shall be controlled as specified in Section VI of this operating permit.
2. Within 60 days after achieving the maximum production rate at which S2.352 will be operated, but no later than 180 days after initial startup, the Permittee will conduct a Method 5/202 (that includes the back-half catch) performance test for PM emissions or a Method 201A/202 performance test for PM<sub>10</sub> emissions consisting of 3 valid runs. The sample volume for each test run shall be at least 60 DSCF, and the sample time shall be a minimum of 1-hour. The Method 5/202 performance tests must be conducted in accordance with 40 CFR Part 60, Appendix A. The Method 201A/202 performance tests must be conducted in accordance with 40 CFR Part 51, Appendix M. All particulate captured in the Method 5/202 test shall be considered PM<sub>10</sub> emissions for compliance demonstration purposes.
3. Within 60 days after achieving the maximum production rate at which S2.350 – S2.354, PF1.510 – PF1.513, each, will be operated, but no later than 180 days after initial startup, the Permittee shall determine compliance with the opacity standards established in Section VI of this operating permit by conducting visible emissions tests on S2.350 – S2.354 and PF1.510 – PF1.513, each, while operating. The initial opacity tests shall be performed using EPA Method 9 as specified in 40 CFR Part 60, Appendix A. The time of observations shall be 6-minutes (24 consecutive readings at 15-second intervals). The Method 9 performance tests shall be conducted by a certified visible emissions reader in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 9.
4. 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 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).
5. The owner 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 (NAC 445B.252.4).
6. Permittee shall comply with the requirements of Section I.S.3. through I.S.8. and I.T.3. through I.T.8. of this operating permit for all performance testing.

**\*\*\*\*\*End of Specific Construction Conditions\*\*\*\*\***



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**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209** Location North 4,538.5 km, East 552.1 km, UTM (Zone 11)

**R. System 18 - Roaster Circuit: Ore Roasting Process**

- |   |         |            |
|---|---------|------------|
| S | 2.209.1 | Roaster #1 |
| S | 2.209.2 | Roaster #2 |

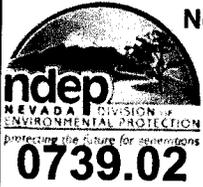
1. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Equipment**

- a. 100% of all process emissions from **S2.209** will be ducted to a control system (**CS-203**) consisting of:
- (1) a venturi wet dust scrubber (**VS-201**) on the exhaust stream of Roaster 1.
  - (2) a venturi wet dust scrubber (**VS-202**) on the exhaust stream of Roaster 2.
  - (3) a wet electrostatic precipitator (**ESP-201**) on the combined exhaust stream of Roasters 1 and 2. ESP-201 consists of an A and B side. The exhaust stream of Roasters 1 and 2 must be ducted through one or both sides at all times during operation of **S2.209**.
  - (4) a mercury scrubber (**HG-201**) on the combined exhaust stream of Roasters 1 and 2.
  - (5) a SO<sub>2</sub> scrubber (**SO2-201**) on the combined exhaust stream of Roasters 1 and 2.
  - (6) a thermal CO oxidizer (**CO-201**) (which includes up to 36 million Btu's per hour of pre-heater and thermal oxidizer burner total heat input) on the combined exhaust stream of Roasters 1 and 2, except as provided by R.1.c. of this Section.
  - (7) a selective catalytic NO<sub>x</sub> reduction system (**SCR-201**) on the combined exhaust stream of Roasters 1 and 2, except as provided by R.1.c. of this Section.
- b. The exhausts from the above control devices will be combined and vented to the atmosphere through a single stack. The above control devices will be operated in accordance with the manufacturer's recommendations at all times during operation of **S2.209**, including startup and shutdown, except as provided by R.1.c. of this Section. Equipment associated with the above control devices with the potential for fugitive chlorine emissions will be equipped with capture hoods (to capture 100% of all process emissions) and ducted to **SO2-201**.
- c. **S2.209** may be operated without the operation of **CO-201** and/or **SCR-201** (or **CO-201** and/or **SCR-201** may be physically removed from the control system) provided that the NO<sub>x</sub> and CO emissions measured by the NO<sub>x</sub> and CO continuous emission monitor, required under R.4.b.(12) and (13) of this Section, remain below the emission limits established in R.2.d. and e. of this Section.

2. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits**

On and after the date of startup of **S2.209**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **CS-203** the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.0** pounds per hour, nor exceed **23.6** tons per year, based on a 12-month rolling period.
- b. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of PM (particulate matter) to the atmosphere will not exceed **6.0** pounds per hour, nor exceed **23.6** tons per year, based on a 12-month rolling period.
- c. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of SO<sub>2</sub> (sulfur dioxide) to the atmosphere will not exceed **44.9** pounds per hour based on a 3-hour rolling average.
- d. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of NO<sub>x</sub> (nitrogen oxides) to the atmosphere will not exceed **36.81** pounds per hour, based on a 3-hour rolling average, nor exceed **145.2** tons per year, based on a 12-month rolling period.
- e. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **47.08** pounds per hour, based on a 3-hour rolling average, nor exceed **185.7** tons per year, based on a 12-month rolling period.
- f. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **22.0** pounds per hour.
- g. NAC 445B.305 (*Federally Enforceable Part 70 Program*) - The discharge of Hg (mercury) to the atmosphere will not exceed **0.2** pound per hour.
- h. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) - The opacity from the exhaust stack discharge of **CS-203** will not equal or exceed **20 percent** in accordance with NAC 445B.22017.



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**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209 (continued)**

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program Operating Parameters

- a. **S2.209** may combust sub bituminous coal, #2 fuel oil, and either HD-5 grade propane or pipeline quality natural gas only. Combustion of a blend of propane and natural gas is prohibited.
- b. The maximum allowable throughput for **S2.209** will not exceed **1,000.0** tons of ore, petroleum contaminated soil (pcs), carbon fines, spent carbon from carbon adsorption controls, and sulfur per any one-hour period, combined, nor exceed **6,752,500** tons of ore, petroleum contaminated soil (pcs), carbon fines, spent carbon from carbon adsorption controls, and sulfur per year, combined, based on a 12-month rolling period. The maximum allowable throughput for **S2.209** will not exceed **22,508** tons of petroleum contaminated soil, carbon fines, spent carbon from carbon adsorption controls, per year, each, based on a 12-month rolling period.
- c. The maximum sub bituminous coal consumption rate for **S2.209** will not exceed **6.8** tons per any one-hour period.
- d. The maximum #2 fuel oil consumption rate for **S2.209** will not exceed **607.0** gallons per any one-hour period.
- e. The maximum fuel consumption rate for **S2.209** will not exceed **437.0** gallons of HD-5 grade propane per any one-hour period.
- f. The maximum fuel consumption rate for **S2.209** will not exceed **40,000.0** cubic feet of pipeline quality natural gas per any one-hour period.
- g. The maximum HD-5 grade propane or pipeline quality natural gas heat input rate for **S2.209** will not exceed **40.0** million Btu's per any one-hour period.
- h. **S2.209** may operate **8,760** hours per year.

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
40 CFR Part 64 Compliance Assurance Monitoring Program

- a. Periodic Compliance Testing
  - (1) Permittee will conduct and record the following periodic compliance tests on the exhaust stack of **CS-203**. **The periodic compliance tests for PM, PM<sub>10</sub>, NO<sub>x</sub>, VOC and SO<sub>2</sub> will be conducted on an annual basis with no more than one year and 90 days between compliance tests. The periodic compliance tests for CO and Hg will be conducted on a once every five-year schedule with no more than five years and 90 days between compliance tests.** The compliance tests will consist of three valid runs (except as provided under 1.U.5. of this operating permit) and be conducted at the maximum achievable throughput rate (subject to Condition R.4.a.(3) of this Section and not to exceed the maximum allowable throughput as established in R.3.b. of this Section).
    - (i) Method 201A and 202 compliance tests in accordance with 40 CFR Part 51, Appendix M (or an alternative EPA reference method approved by the Director) for PM<sub>10</sub>.
    - (ii) Method 5 or 17 (with back-half catch) compliance test for PM in accordance with 40 CFR Part 60, Appendix A (or alternative EPA reference methods approved by the Director).
    - (iii) Method 6, 7E, 10, 25/25A and 29 compliance tests for SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC and Hg in accordance with 40 CFR Part 60, Appendix A (or an alternative EPA reference method approved by the Director).
  - (2) The Method 201A and Method 202 tests required in R.4.a.(1) of this section may be replaced by a Method 5 or 17 test which includes the back-half catch. All particulate captured in the Method 5 or 17 tests with back-half performed under this provision shall be considered PM<sub>10</sub> emissions for determination of compliance with the emission limitations established in R.2.a. of this section.
  - (3) Compliance tests required under R.4.a.(1) of this Section that are conducted below the maximum allowable throughput, as established in R.3.b. of this Section, will be subject to the Director's review to determine if the throughputs during the compliance tests were sufficient to provide adequate compliance demonstration. Should the Director determine that the compliance tests do not provide adequate compliance demonstration, then the Director may order additional compliance testing.
  - (4) Concurrent with each periodic PM compliance test, conduct and record a Method 9 visible emission test on the exhaust stack of **CS-203** in accordance with 40 CFR Part 60, Appendix A (or an alternative reference method approved by the Director). If visibility or other conditions prevent the opacity observations from being conducted concurrently with the compliance test, then the visible emission test will be rescheduled as soon after the compliance test as practical, but not later than 30 days thereafter.
  - (5) The compliance tests required for NO<sub>x</sub> and CO under R.4.a.(1) of this Section will be conducted within 60 days of switching the fuel combusted in **S2.209** as allowed under R.3.a of this Section.
  - (6) Once every calendar year, conduct the Relative Accuracy Test Audit (RATA) required to certify the performance of the SO<sub>2</sub>, CO and NO<sub>x</sub> CEMS described in paragraph 4.b.(12) of this section. The annual RATA for each CEMS must be conducted within 4 calendar quarters of the previous RATA. Each RATA must be conducted in accordance with Performance Specifications 2 and 4 in Appendix B to 40 CFR Part 60, and comply with the notification, protocol approval, and reporting requirements of NAC 445B.252 Testing and Sampling, and NAC 445B.259 Monitoring systems: Performance evaluations.



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**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209 (continued)**

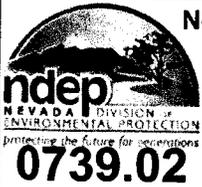
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
40 CFR Part 64 Compliance Assurance Monitoring Program  
a. Periodic Compliance Testing (continued)

- (7) Once every calendar year, conduct the Relative Accuracy Test required to verify the performance of the flow monitoring device described in paragraph 4.b.(13) of this section. The annual Test must be conducted within 4 calendar quarters of the previous Test. The annual Test must be done in accordance with the requirements of Appendix E to 40 CFR Part 52 or Performance Specifications 2 and 4 in Appendix B to 40 CFR Part 60, and must comply with the notification, protocol approval, and reporting requirements of NAC 445B.252 Testing and Sampling, and NAC 445B.259 Monitoring systems: Performance evaluations.

b. Monitoring and Recordkeeping

On and after the date of initial startup, Permittee will:

- (1) Monitor and record the amount of sub bituminous coal, #2 fuel oil and HD-5 grade propane or pipeline quality natural gas combusted in **S2.209**, and the combined throughput of ore, petroleum contaminated soil, carbon fines, spent carbon from carbon adsorption controls, and sulfur of **S2.209** on a daily basis. At the end of each calendar month, record the total monthly ore, petroleum contaminated soil, carbon fines, spent carbon from carbon adsorption controls, and sulfur throughputs, each, and the total ore, petroleum contaminated soil, carbon fines, and spent carbon from carbon adsorption controls throughputs, each, for the previous 12 months.
- (2) Monitor and record the hours of operation of **S2.209** on a daily basis.
- (3) Monitor and record sulfide sulfur content, total carbonaceous matter content and carbonate value of the ore processed in **S2.209** on a daily basis.
- (4) Install, calibrate, operate and maintain devices for the measurement the fuel consumption rate for each fuel combusted in **S2.209**.
- (5) Install, calibrate, operate and maintain devices for the measurement of the following control parameters for the following control equipment:  
**CO-201** operating temperature.  
**VS-201** pressure drop across the venturi wet dust scrubber.  
**VS-202** pressure drop across the venturi wet dust scrubber.  
**ESP-201** ESP transformer primary and secondary voltage and current.  
**HG-201** mercuric chloride solution line pressure prior to the scrubber tower spray header and inlet gas temperature.
- (6) Establish a procedure for the measurement of the following control parameter for the following control equipment: **HG-201** mercuric chloride solution concentration exiting the scrubber.
- (7) Conduct and record a reading of the control parameters specified under R.4.b.(5) of this Section for **HG-201** and **CO-201**, based on a one-hour period, once during each day of operation. Conduct and record a measurement of the mercuric chloride solution concentration specified under R.4.b.(6) of this Section once during each day of operation. Record any monitored excursions from the indicator range and record any corrective actions taken.
- (8) Continuously monitor and record the control parameters specified under R.4.b.(5) for **VS-201**, **VS-202** and **ESP-201**. Record any monitored excursions from the indicator range and record any corrective actions taken.
- (9) The indicator ranges for the two venturi wet scrubbers (**VS-201** and **VS-202**) and the wet electrostatic precipitator (**ESP-201**) shall be defined as follows: The pressure drop for the two venturi wet scrubbers shall be maintained at or above **35 inches of water** and the water flow rate shall be maintained at or above **300 gallons per minute**. The primary voltage for both the A and B sides of the wet electrostatic precipitator shall be maintained at or above **110 volts**, the primary current for both sides shall be maintained at or above **2 amps** for the A side and **1 amp** for the B side, the secondary voltage for both sides shall be maintained at or above **7 kilovolts** for the A side and **3 kilovolts** for the B side, and the secondary current for both sides shall be maintained at or above **8 milliamps** for the A side and **3 milliamps** for the B side. Excursions shall be defined as anytime the control parameters, based on a one-hour period, fall outside these indicator ranges.
- (10) The indicator ranges for the thermal CO oxidizer (**CO-201**) and the mercury scrubber (**HG-201**) shall be defined as follows: The operating temperature for **CO-201** shall be maintained at or above **1,430°F**. The head pressure of **HG-201** shall be between **1 and 9 pounds per square inch (psi)**, the inlet gas stream temperature shall be between **32 and 134 degrees Fahrenheit**, the mercury(II) chloride concentration shall be maintained at or above **1.0 gram per liter (g/l)**. Excursions shall be defined as anytime the control parameters, based on a one-hour period, for the oxidizer temperature, the scrubber head pressure, the scrubber inlet gas stream temperature and the mercury(II) chloride concentration fall outside these indicator ranges.



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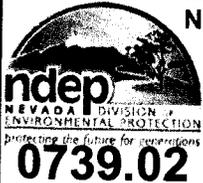
**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
40 CFR Part 64 Compliance Assurance Monitoring Program

b. Monitoring and Recordkeeping (continued)

- (11) Conduct and record an assessment of the visible emissions (excluding water vapor) from the single exhaust stack of **CS-203** on a weekly basis. If the visible emission survey detects any visible emissions, the Permittee will conduct and record a Method 9 (or an alternative EPA reference method approved by the Director) visible emissions test. Each visible emissions assessment and Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, and while **S2.209** is operating and has the potential to create visible emissions. If **CS-203** is shut down for maintenance or repairs, the visible emissions assessment described herein will be conducted upon startup. It will be noted in a contemporaneous log if a visual emissions assessment could not be conducted due to **S2.209** not operating or due to poor weather conditions.
- (12) Install, calibrate, operate and maintain continuous monitoring systems for the measurement of SO<sub>2</sub>, NO<sub>x</sub> and CO in the exhaust stack of **CS-203**. The CEMS sampling devices must be installed in accordance with the requirements of Performance Specifications 2 and 4 in Appendix B to 40 CFR Part 60, and NAC 445B.256 to NAC 445B.257. The SO<sub>2</sub>, NO<sub>x</sub> and CO CEMS shall be calibrated, operated and maintained in accordance with the quality control and quality assurance procedures described in Procedure 1 of Appendix F to 40 CFR Part 60—Quality Assurance Procedures, and with the applicable requirements of NAC 445B.258 and NAC 445B.261 to NAC 445B.263.
- (13) Install, calibrate, operate and maintain a continuous emissions monitoring system (CEMS) to measure stack gas volumetric flow rates in the exhaust stack of **CS-203**. The volumetric flow rate CEMS sampling device must be installed in accordance with the requirements of Performance Specifications 2 and 4 in Appendix B to 40 CFR Part 60 and NAC 445B.257. The volumetric flow rate CEMS must be calibrated, operated and maintained in accordance with the applicable requirements of NAC 445B.258 and NAC 445B.261 to NAC 445B.263.
- (14) Record hourly average mass emissions of SO<sub>2</sub>, NO<sub>x</sub> and CO, in terms of pounds per hour, using the data collected from the continuous monitoring systems required under R.4.b.(12) and (13). At the end of each calendar month, calculate and record the total monthly SO<sub>2</sub>, NO<sub>x</sub> and CO emissions and the total SO<sub>2</sub>, NO<sub>x</sub> and CO emissions for the previous 12 months. The first hourly average will be calculated by taking the average of the first three hours of data. Subsequent averages will drop off the oldest hour of data and add the newest hour's data to maintain a continuous hourly average based on the most recent three hours of data.
- (15) Excess emissions for SO<sub>2</sub>, NO<sub>x</sub> or CO shall be defined as any 3-hour period during which the average emissions of SO<sub>2</sub>, NO<sub>x</sub> or CO, as measured by the CEMS devices or a compliance test, exceed the maximum emission limits set forth in R.2 of this Section.
- (16) Maintain records of monitoring data (including periods of startup and shutdown, continuous monitoring systems evaluations, calibration checks, and adjustment and maintenance performed on these systems), compliance tests and supporting information for a minimum of 5 years following the date of such measurements, reports or records pursuant to Section V.A of this permit. The most recent 2 years will be retained on site and made available for inspection upon request. Monitoring data collected by the CEMS described in Paragraphs 4.b.(12) and 4.b.(13) of this section must be recorded in accordance with the requirements of NAC 445B.264 to NAC 445B.265.
- (17) The hourly throughput rate in tons per hour for **S2.209** will be determined from the total daily throughput and the total daily hours of operation recorded above.
- (18) The hourly coal consumption rate in tons per hour for **S2.209** will be determined from the total daily coal consumption and the total daily hours of operation recorded above.
- (19) The hourly #2 fuel oil consumption rate in gallons per hour for **S2.209** will be determined from the total daily #2 fuel oil consumption and the total daily hours of operation recorded above.
- (20) The hourly propane or natural gas heat input rate in millions of Btu's per hour for **S2.209** will be determined from the total daily propane or natural gas consumption and the total daily hours of operation recorded above.



**BUREAU OF AIR POLLUTION CONTROL**

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**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.,** as Permittee

**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209 (continued)**

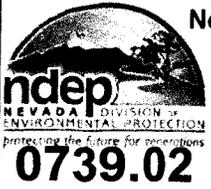
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
40 CFR Part 64 Compliance Assurance Monitoring Program

b. Monitoring and Recordkeeping (continued)

- (21) The required monitoring established in b.(1) through (20) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.209** is operating:
- (i) The calendar date of any required monitoring.
  - (ii) The total daily throughput rate of ore, petroleum contaminated soil, carbon fines, spent carbon from carbon adsorption controls, and sulfur, combined, in tons, for the corresponding date.
  - (iii) The total daily hours of operation for the corresponding date.
  - (iv) The corresponding average hourly throughput rate of ore, petroleum contaminated soil (pcs), carbon fines, spent carbon from carbon adsorption controls, and sulfur, combined, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in b.(1) and (2) above.
  - (v) The total daily fuel consumption rate of gallons of HD-5 grade propane, tons of sub bituminous coal, gallons of #2 fuel oil or cubic feet of pipeline quality natural gas, for the corresponding date.
  - (vi) The corresponding average hourly fuel consumption rate of gallons of HD-5 grade propane, tons of sub bituminous coal, gallons of #2 fuel oil or cubic feet of pipeline quality natural gas. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in b.(1) and (2) above.
  - (vii) Results of the one-hour period reading of the pressure drop across venturi wet dust scrubbers **VS-201** and **VS-202**, each day that **S2.209** is in operation.
  - (viii) Results of the one-hour period reading of the primary and secondary voltage and current on wet electrostatic precipitator **ESP-201**, each day that **S2.209** is in operation.
  - (ix) Results of the one-hour period reading of the operating temperature on thermal oxidizer **CO-201**, each day that **S2.209** is in operation.
  - (x) Results of the one-hour period readings of the operating head pressure, the inlet gas stream temperature and the mercury(II) chloride concentration of mercury scrubber **HG-201**, each day that **S2.209** is in operation.
  - (xi) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.

c. Reporting (State Only Requirement)

- (1) Report actual 12-month rolling average emissions of SO<sub>2</sub> recorded from the CEMS required in 4.b(14) of this Section from the combined exhaust stream of Roasters 1 and 2 on a semi-annual basis, commencing with the first semi-annual report required under Section V.C.3 of this Operating Permit following the notice of startup of the changes approved in the February 2010 Minor Revision Application required under Section II.A.3 of this Operating Permit. These reports shall be submitted for four reporting cycles unless the 12-month rolling average emissions for any 12-month rolling period in the report exceeds the baseline actual emissions identified in the February 2010 Minor Revision Application plus 20 tons/year (93.5 tons/year) SO<sub>2</sub>. If the emissions exceed 93.5 tons/year SO<sub>2</sub>, these reports shall be submitted for five years following startup of the changes approved in the February 2010 Minor Revision Application.
- (2) In accordance with NAC 445B.265 Monitoring systems: Records; reports, submit a written report of excess emissions to the Director for every calendar quarter. All quarterly reports must be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter, and must include the information specified under Paragraph 2 of NAC 445B.265 for the SO<sub>2</sub>, CO, NO<sub>x</sub>, and volumetric flow rate CEMS described in paragraph s4.b.(12) and 4.b.(13) of this section.



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**Section VI. Specific Operating Conditions (continued)**

**R. Emission Units S2.209 (continued)**

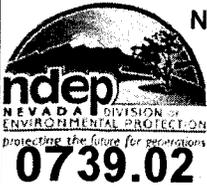
5. **Shielded Requirements** NAC 445B.3405 (NAC 445B.316) *Federally Enforceable Part 70 Program*  
Compliance with conditions R.1 through R.4 of this Section will be deemed compliance with the applicable requirements specified below, as of the issuance date of this operating permit.

**Applicable SIP Requirements:**

- NAC 445.731 (Particulate Matter - Fuel Burning Equipment) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
NAC 445.732 (Industrial Sources) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
Article 8.2 (Fuel-Burning Equipment) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
NAC 445.746 (Other Sulfur Emitting Processes) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).

**NAC Requirements:**

- 445B.2203 (Fuel-Burning Equipment) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
445B.22033 (Sources not Otherwise Limited) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
445B.22047 (Fuel-Burning Equipment) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).  
445B.2205 (Other Process which Emit Sulfur) - see streamline analysis provided in Appendix 4 of operating permit renewal application, received September 20, 2006 (Case #07AP0121).



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**Section VI. Specific Operating Conditions (continued)**

**BN. Emission Units S2.015, and S2.018 through S2.020  
Emission Units S2.016 and S2.017**

Location North 4,536.0 km, East 554.7 km, UTM (Zone 11)  
Location North 4,536.1 km, East 554.7 km, UTM (Zone 11)

**BN. System 66 - Autoclave Circuit**

S	2.015	Autoclave #1
S	2.016	Autoclave #2
S	2.017	Autoclave #3
S	2.018	Autoclave #4
S	2.019	Autoclave #5
S	2.020	Autoclave #6

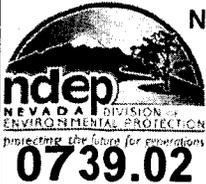
1. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Equipment**

100% of all process emissions from **S2.215 through S2.020** will be ducted to a control system consisting of:

- a. A venturi wet dust scrubber on the exhaust stream of **S2.015** (Autoclave 1).
- b. A venturi wet dust scrubber on the exhaust stream of **S2.016** and **S2.017** (Autoclaves 2 and 3).
- c. A venturi wet dust scrubber on the exhaust stream of **S2.018** (Autoclave 4).
- d. A venturi wet dust scrubber on the exhaust stream of **S2.019** and **S2.020** (Autoclaves 5 and 6).

2. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits**

- a. On and after the date of startup of **S2.015**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.015** the following pollutants in excess of the following specified limits:
  - (1) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **2.28** pounds per hour, nor exceed **9.99** tons per year, based on a 12-month rolling period.
  - (2) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM** (particulate matter) to the atmosphere will not exceed **2.28** pounds per hour, nor exceed **9.99** tons per year, based on a 12-month rolling period.
  - (3) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $SO_2$  (sulfur dioxide) to the atmosphere will not exceed **0.29** pound per hour, nor exceed **1.27** tons per year, based on a 12-month rolling period.
  - (4) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $H_2S$  (hydrogen sulfide) to the atmosphere will not exceed **1.50** pounds per hour, nor exceed **6.57** tons per year, based on a 12-month rolling period.
  - (5) **NAC 445B.22017 (State Only Requirement)** - The opacity from the exhaust stack of **S2.015** will not equal or exceed **20%** in accordance with **NAC 445B.22017**.
  - (6) **NAC 445.721 (Federally Enforceable SIP Requirement)** - The opacity from the exhaust stack of **S2.015** will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any 1 hour, in accordance with **NAC 445.721**.
- b. On and after the date of startup of **S2.016** and **S2.017**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.016** and **S2.017** the following pollutants in excess of the following specified limits:
  - (1) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **7.00** pounds per hour, total, nor exceed **30.66** tons per year, total, based on a 12-month rolling period.
  - (2) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM** (particulate matter) to the atmosphere will not exceed **7.00** pounds per hour, total, nor exceed **30.66** tons per year, total, based on a 12-month rolling period.
  - (3) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $SO_2$  (sulfur dioxide) to the atmosphere will not exceed **0.90** pound per hour, total, nor exceed **3.94** tons per year, total, based on a 12-month rolling period.
  - (4) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $H_2S$  (hydrogen sulfide) to the atmosphere will not exceed **3.00** pounds per hour, total, nor exceed **13.14** tons per year, total, based on a 12-month rolling period.
  - (5) **NAC 445B.22017 (State Only Requirement)** - The opacity from the exhaust stack of **S2.016** and **S2.017** will not equal or exceed **20%** in accordance with **NAC 445B.22017**.
  - (6) **NAC 445.721 (Federally Enforceable SIP Requirement)** - The opacity from the exhaust stack of **S2.016** and **S2.017** will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any 1 hour, in accordance with **NAC 445.721**.



**BUREAU OF AIR POLLUTION CONTROL**

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**Section VI. Specific Operating Conditions (continued)**

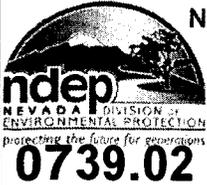
**BN. Emission Units S2.015 through S2.020 (continued)**

2. **NAC 445B.3405 (NAC 445B.316) Part 70 Program**  
Emission Limits

- c. On and after the date of startup of **S2.018**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.018** the following pollutants in excess of the following specified limits:
- (1) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM<sub>10</sub>** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **3.50** pounds per hour, nor exceed **15.33** tons per year, based on a 12-month rolling period.
  - (2) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM** (particulate matter) to the atmosphere will not exceed **3.50** pounds per hour, nor exceed **15.33** tons per year, based on a 12-month rolling period.
  - (3) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **SO<sub>2</sub>** (sulfur dioxide) to the atmosphere will not exceed **0.45** pound per hour, nor exceed **1.97** tons per year, based on a 12-month rolling period.
  - (4) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **H<sub>2</sub>S** (hydrogen sulfide) to the atmosphere will not exceed **1.50** pounds per hour, nor exceed **6.57** tons per year, based on a 12-month rolling period.
  - (5) **NAC 445B.22017 (State Only Requirement)** - The opacity from the exhaust stack of **S2.018** will not equal or exceed **20%** in accordance with **NAC 445B.22017**.
  - (6) **NAC 445.721 (Federally Enforceable SIP Requirement)** - The opacity from the exhaust stack of **S2.018** will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any 1 hour, in accordance with **NAC 445.721**.
- d. On and after the date of startup of **S2.019** and **S2.020**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.019** and **S2.020** the following pollutants in excess of the following specified limits:
- (1) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM<sub>10</sub>** (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **7.00** pounds per hour, total, nor exceed **30.66** tons per year, total, based on a 12-month rolling period.
  - (2) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **PM** (particulate matter) to the atmosphere will not exceed **7.00** pounds per hour, total, nor exceed **30.66** tons per year, total, based on a 12-month rolling period.
  - (3) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **SO<sub>2</sub>** (sulfur dioxide) to the atmosphere will not exceed **0.90** pound per hour, total, nor exceed **3.94** tons per year, total, based on a 12-month rolling period.
  - (4) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of **H<sub>2</sub>S** (hydrogen sulfide) to the atmosphere will not exceed **3.00** pounds per hour, total, nor exceed **13.14** tons per year, total, based on a 12-month rolling period.
  - (5) **NAC 445B.22017 (State Only Requirement)** - The opacity from the exhaust stacks of **S2.019** and **S2.020** each will not equal or exceed **20%** in accordance with **NAC 445B.22017**.
  - (6) **NAC 445.721 (Federally Enforceable SIP Requirement)** - The opacity from the exhaust stacks of **S2.019** and **S2.020** each will not equal or exceed **20%** for a period or periods aggregating more than 3 minutes in any 1 hour, in accordance with **NAC 445.721**.

3. **NAC 445B.3405 (NAC 445B.316) Part 70 Program**  
Operating Parameters

- a. The maximum allowable throughput rate for **S2.015** will not exceed **130.0** tons of ore per any one-hour period.
- b. The maximum allowable throughput rate for **S2.016** and **S2.017** will not exceed **200.0** tons of ore per any one-hour period, each.
- c. The maximum allowable throughput rate for **S2.018** will not exceed **200.0** tons of ore per any one-hour period.
- d. The maximum allowable throughput rate for **S2.019** and **S2.020** will not exceed **200.0** tons of ore per any one-hour period, each.
- e. **S2.015** through **S2.020** may operate **8,760** hours per year, each.



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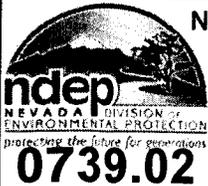
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**Section VI. Specific Operating Conditions (continued)**

**BW. Emission Units S2.080 through S2.083 (continued)**

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. **S2.080, S2.081 and S2.083** each may store fuel oil only.
  - b. **S2.082** may store gasoline only.
  - c. The maximum allowable throughput for **S2.080** will not exceed **25,000,000** gallons of #2 fuel oil per year, based on a 12-month rolling period.
  - d. The maximum allowable throughput for **S2.081** will not exceed **5,600,000** gallons of #2 fuel oil per year, based on a 12-month rolling period.
  - e. The maximum allowable throughput for **S2.082** will not exceed **530,000** gallons of gasoline per year, based on a 12-month rolling period.
  - f. The maximum allowable throughput for **S2.083** will not exceed **3,000,000** gallons of #2 fuel oil per year, based on a 12-month rolling period.
  - g. **S2.080 through S2.083** each may operate **8,760** hours per year.
  
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Recordkeeping, Reporting and Compliance  
On and after the date of initial startup, Permittee will:
    - (1) Monitor and record the amount of fuel loaded in **S2.080 through S2.083** each, on a monthly basis. At the end of each calendar month, record the total fuel throughput for the previous 12 months.
    - (2) Maintain records of the tank dimensions and capacity for the life of **S2.080 through S2.083** each in accordance with 40 CFR, Part 60, Subpart Kb.
    - (3) Maintain records of monitoring data, compliance tests and supporting information for a minimum of 5 years following the date of such measurements, reports or records pursuant to Section V.A of this permit. The most recent 2 years will be retained on site and made available for inspection upon request.
  
5. 40 CFR Part 63, Subpart CCCCCC – NESHAP for Gasoline Dispensing Facilities (40 CFR 63.11110, et. seq.)
  - a. **S2.082** is an existing affected source (40 CFR 63.11112(d)), with a combined monthly gasoline throughput of greater than 10,000 gallons of gasoline (40 CFR 63.11111(c)), but less than 100,000 gallons of gasoline.
  - b. You (Permittee) must comply with the standards in Subpart CCCCCC no later than January 10, 2011 (40 CFR 63.11113(b)).
  - c. You (Permittee) must, at all times, 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 63.11115).
  - d. You (Permittee) must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
    - (1) Minimize gasoline spills (40 CFR 63.11116(a)(1)).
    - (2) Clean up spills as expeditiously as practicable (40 CFR 63.11116(a)(2)).
    - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use (40 CFR 63.11116(a)(3)).
    - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators (40 CFR 63.11116(a)(4)).
  - e. You (Permittee) must only load gasoline into storage tanks at your facility by utilizing submerged filling, as demonstrated by the Permittee by showing that the liquid level in the gasoline storage tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit (40 CFR 63.11117(b)(3)).
  - f. You (Permittee) must have records available within 24 hours of a request by the Administrator to document your gasoline throughput (40 CFR 63.11117(d)).
  
6. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

N/A



**BUREAU OF AIR POLLUTION CONTROL**

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**Section VI. Specific Operating Conditions (continued)**

DO. Emission Units **S2.321 through S2.323**

Location North 4,536.01 km, East 554.73 km, UTM (Zone 11)

DO. System 114 - Autoclave Circuit, Alternate Operating Scenario to System 66 (emission units **S2.018, S2.019, S2.020**)

S	2.321	Autoclave #4
S	2.322	Autoclave #5
S	2.323	Autoclave #6

1. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Equipment**

100% of all process emissions from **S2.321 through S2.323** will be ducted to a control system consisting of:

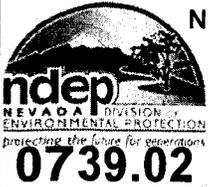
- a. A primary venturi wet dust scrubber on the exhaust stream of **S2.321** (Autoclave 4).
- b. A primary venturi wet dust scrubber on the exhaust stream of **S2.322** (Autoclave 5).
- c. A primary venturi wet dust scrubber on the exhaust stream of **S2.323** (Autoclave 6).
- d. A secondary venturi wet dust scrubber on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).
- e. A scrubber mist eliminator on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).
- f. A gas cooling tower on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).
- g. A condenser on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).
- h. A wet gas separator on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).
- i. a carbon filter on the combined exhaust stream of **S2.321 through S2.323** (Autoclaves 4 through 6).

2. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits**

- a. On and after the date of startup of **S2.321 through S2.323**, Permittee will not discharge or cause the discharge into the atmosphere from the combined exhaust stack of **S2.321 through S2.323** the following pollutants in excess of the following specified limits:
  - (1) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $PM_{10}$  (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **10.50** pounds per hour, nor exceed **45.99** tons per year, based on a 12-month rolling period.
  - (2) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of PM (particulate matter) to the atmosphere will not exceed **10.50** pounds per hour, nor exceed **45.99** tons per year based on a 12-month rolling period.
  - (3) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $SO_2$  (sulfur dioxide) to the atmosphere will not exceed **1.35** pound per hour, nor exceed **5.91** tons per year, based on a 12-month rolling period.
  - (4) **NAC 445B.305 (Federally Enforceable Part 70 Program)** - The discharge of  $H_2S$  (hydrogen sulfide) to the atmosphere will not exceed **4.50** pounds per hour, nor exceed **19.71** tons per year, based on a 12-month rolling period.
  - (5) **NAC 445B.22017 (State Only Requirement)** - The opacity from the combined exhaust stack of **S2.321 through S2.323** will not equal or exceed **20%** in accordance with **NAC 445B.22017**.
- b. **NAC 445B.22033 (Federally Enforceable SIP Requirement)** - The discharge of  $PM_{10}$  to the atmosphere for **S2.321 through S2.323**, each, will not exceed **58.51** pounds per hour.
- c. **NAC 445B.2205 (Federally Enforceable SIP Requirement)** - The discharge of sulfur to the atmosphere for **S2.321 through S2.323**, each, will not exceed **526.80** pounds per hour.

3. **NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters**

- a. The maximum allowable throughput rate for **S2.321 through S2.323** will not exceed **200.0** tons of ore per any one-hour period, each.
- b. **S2.321 through S2.323** may operate only when emission units **S2.018 through S2.020 (System 66)** are not operating.
- c. **S2.321 through S2.323** may operate **8,760** hours per year, each.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

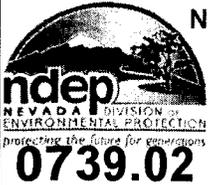
**Section VI. Specific Operating Conditions (continued)**

**DR. Emission Unit #S2.350**

Location North 4,538.156 km, East 552.250 km, UTM (Zone 11)

<b>System 133A – Paste Backfill Plant: Cement Silo Loading</b>		
S	2.350	Paste Backfill Plant: 250-Ton Cement Silo – Loading

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment NAC 445B.3405 (NAC 445B.316))
  - a. Emissions from **S2.350** will be ducted to a control system consisting of a Vent Filter with a 100% capture rate.
  
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput for **S2.350** will not exceed 25 tons of cement per any one-hour period.
  - b. Total annual cement loading rate for **S2.350** will not exceed 105,120 tons per 12-month rolling period.
  - c. Hours  
**S2.350** may operate up to 8,760 hours per calendar year.
  
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. NAC 445B.305 Part 70 Program  
On and after the date of startup of **S2.350**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.350**, the following pollutants in excess of the following specified limits:
    - (1) The discharge of PM to the atmosphere will not exceed 0.03 pound per hour, nor more than 0.05 ton per year.
    - (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.01 pound per hour, nor more than 0.02 ton per year.
    - (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 35.4 pounds per hour in accordance with NAC 445B.22033.
    - (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the **S2.350** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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**0739.02**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DR. Emission Unit #S2.350 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of **S2.350**, Permittee will:

- a. Monitor and record the daily weight of cement loaded into **S2.350** and the duration of loading each day loading occurs.
- b. Monitor and record the average loading rate (tons per hour) of cement using the monitoring in 4.a. above.
- c. Monitor and record the throughput (in tons) of cement for **S2.350** on a monthly basis.
- d. On a monthly basis, monitor and record the 12-month rolling throughput (in tons per 12-month rolling period) of cement for **S2.350** using the monthly recordkeeping in 4.c. above.
- e. Conduct a weekly inspection of the Vent Filter control device for **S2.350**, in accordance with the manufacturer's operation and maintenance manual, and record the results (e.g. condition of filters and housing) and any corrective actions taken.
- f. Conduct and record a Method 22 visible emissions test (excluding water vapor) on the exhaust vent of **S2.350** on a monthly basis while operating. The Method 22 tests shall be conducted as set forth in 40 CFR Part 60, Appendix A for a period of 6 minutes. If the Method 22 tests detect any visible emissions, the Permittee will conduct and record a Method 9 visible emissions test. Each Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.

5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping

- a. Permittee will maintain, in a contemporaneous log, the monitoring required in DR.4. above, including the calendar date of any required monitoring.

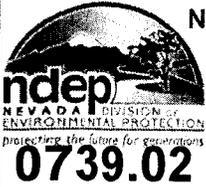
6. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections **VI** and **VII** of this operating permit.

7. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

No shielded requirements.



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**0739.02**

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SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

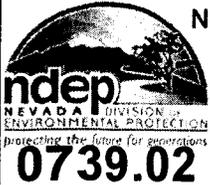
**Section VI. Specific Operating Conditions (continued)**

**DS. Emission Unit #S2.351**

Location North 4,538.156 km, East 552.250 km, UTM (Zone 11)

<b>System 133B – Paste Backfill Plant: Flyash Silo Loading</b>		
S	2.351	Paste Backfill Plant: 250-Ton Flyash Silo – Loading

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment NAC 445B.3405 (NAC 445B.316))
  - a. Emissions from **S2.351** will be ducted to a control system consisting of a Vent Filter with a 100% capture rate.
  
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput for **S2.351** will not exceed 25 tons of flyash per any one-hour period.
  - b. Total annual flyash loading rate for **S2.351** will not exceed 105,120 tons per 12-month rolling period.
  - c. Hours  
**S2.351** may operate up to 8,760 hours per calendar year.
  
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. NAC 445B.305 Part 70 Program  
 On and after the date of startup of **S2.351**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.351**, the following pollutants in excess of the following specified limits:
    - (1) The discharge of PM to the atmosphere will not exceed 0.22 pound per hour, nor more than 0.47 ton per year.
    - (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.12 pound per hour, nor more than 0.26 ton per year.
    - (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 35.4 pounds per hour in accordance with NAC 445B.22033.
    - (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the **S2.351** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



**BUREAU OF AIR POLLUTION CONTROL**

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**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DS. Emission Unit #S2.351 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of **S2.351**, Permittee will:

- a. Monitor and record the daily weight of flyash loaded into **S2.351** and the duration of loading each day loading occurs.
- b. Monitor and record the average loading rate (tons per hour) of flyash using the monitoring in 4.a. above.
- c. Monitor and record the throughput (in tons) of flyash for **S2.351** on a monthly basis.
- d. On a monthly basis, monitor and record the 12-month rolling throughput (in tons per 12-month rolling period) of flyash for **S2.351** using the monthly recordkeeping in 4.c. above.
- e. Conduct a weekly inspection of the Vent Filter control device for **S2.351**, in accordance with the manufacturer's operation and maintenance manual, and record the results (e.g. condition of filters and housing) and any corrective actions taken.
- f. Conduct and record a Method 22 visible emissions test (excluding water vapor) on the exhaust vent of **S2.351** on a monthly basis while operating. The Method 22 tests shall be conducted as set forth in 40 CFR Part 60, Appendix A for a period of 6 minutes. If the Method 22 tests detect any visible emissions, the Permittee will conduct and record a Method 9 visible emissions test. Each Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.

5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping

- a. Permittee will maintain, in a contemporaneous log, the monitoring required in DS.4. above, including the calendar date of any required monitoring.

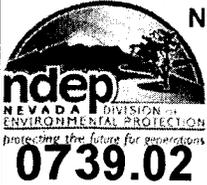
6. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections **VI** and **VII** of this operating permit.

7. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

No shielded requirements.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

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**CLASS I AIR QUALITY OPERATING PERMIT  
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Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DT. Emission Units #S2.352.1, S2.352.2, and S2.352.3**

Location North 4538.178 km, East 552.258 km, UTM (Zone 11)

<b>System 134 – Paste Backfill Plant Material Transfers</b>		
S	2.352.1	Cement Silo Discharge to Screw Conveyor
S	2.352.2	Flyash Silo Discharge to Screw Conveyor
S	2.352.3	Screw Conveyor Discharge

Descriptive Stack Parameters for Wet Scrubber WS-207

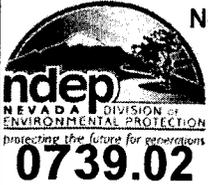
Stack Height (ft): 20

Stack Diameter (ft): 1.5

Stack Temperature (°F): Ambient

Exhaust Flow (DSCFM): 1,800

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment (NAC 445B.3405 (NAC 445B.316))
  - a. Emissions from **S2.352.1, S2.352.2, and S2.352.3** will be ducted, with 100% capture, to a control system consisting of a Wet Scrubber (WS-207, DUCON Environmental Systems).
  
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput rate of cement and flyash for **S2.352.1 and S2.352.2**, each, will not exceed 12 tons per hour, nor more than 105,120 tons per 12-month rolling period.
  - b. The maximum allowable throughput of cement and flyash, combined, for **S2.352.3** will not exceed 24 tons per hour, nor more than 210,240 tons per 12-month rolling period.
  - c. Hours  
**S2.352.1, S2.352.2, and S2.352.3**, each, may operate up to 8,760 hours per calendar year.
  
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. NAC 445B.305 Part 70 Program  
On and after the date of startup of **S2.352.1, S2.352.2, and S2.352.3**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.352.1, S2.352.2, and S2.352.3**, the following pollutants in excess of the following specified limits:
    - (1) The discharge of PM to the atmosphere will not exceed 0.25 pound per hour, nor more than 1.1 tons per year.
    - (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.25 pound per hour, nor more than 1.1 tons per year.
    - (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 34.5 pounds per hour in accordance with NAC 445B.22033.
    - (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the stack discharge of **S2.352.1, S2.352.2, and S2.352.3** will not equal or exceed 20% in accordance with NAC 445B.22017.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

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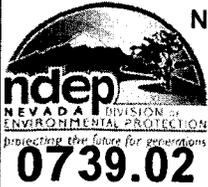
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**Section VI. Specific Operating Conditions (continued)**

**DT. Emission Units # S2.352.1, S2.352.2, and S2.352.3 (continued)**

**4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Performance Testing**

- a. The Permittee will conduct and record a Method 5/202 (that includes the back-half catch) performance test for PM emissions, or a Method 201A/202 performance test for PM<sub>10</sub> emissions consisting of 3 valid runs, on the exhaust stack of **S2.352.1, S2.352.2, and S2.352.3**. The time interval between periodic performance tests shall be no longer than 5-years and 90 days. The sample volume for each test run shall be at least 60 DSCF, and the sample time shall be a minimum of 1-hour. All particulate captured in the Method 5/202 test shall be considered PM<sub>10</sub> emissions for compliance demonstration purposes. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A. The Methods 201A/202 tests must be conducted in accordance with 40 CFR Part 51, Appendix M.
- b. The Permittee will conduct and record a Method 9 visible emissions test for opacity on the exhaust stack of **S2.352.1, S2.352.2, and S2.352.3** while operating. The annual Method 9 test shall be performed at the same time as the performance test for PM emissions. The total time of visible emission observations shall be 6 minutes (24 consecutive observations recorded at 15-second intervals). Visible emissions readings will use the procedures contained in 40 CFR Part 60, Appendix A, Method 9.
- c. Permittee will monitor and record the throughput (in tons) of cement and flyash, combined, during each test run.
- d. Permittee will monitor and record the pressure drop and water flow rate for the Wet Scrubber WS-207 during each test run.
- e. Permittee shall comply with the requirements in Sections I.S.3 through I.S.8 and I.T.3. through I.T.8. of this operating permit for all performance testing.



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Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DT. Emission Units # S2.352.1, S2.352.2, and S2.352.3 (continued)**

**5. NAC 445B.3405 (NAC 445B.316) Part 70 Program**

**Monitoring**

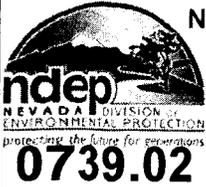
On and after the date of initial startup of **S2.352.1, S2.352.2, and S2.352.3**, Permittee will:

- a. Install, calibrate, operate, and maintain devices for measurement of the pressure drop and water flow rate through the Wet Scrubber WS-207.
- b. Monitor and record the daily weight of cement and flyash (in tons) for **S2.352.1, S2.352.2, and S2.352.3**, each, on a daily basis.
- c. Monitor and record the hours of operation for **S2.352.1, S2.352.2, and S2.352.3**, each, on a daily basis.
- d. Record the average hourly throughput rate (in tons per hour) for **S2.352.1, S2.352.2, and S2.352.3**, each, on a daily basis using the recordkeeping in 5.a. and 5.b. above.
- e. Monitor and record the throughput (in tons) of cement and flyash for **S2.352.1, S2.352.2, and S2.352.3**, each, on a monthly basis.
- f. On a monthly basis, monitor and record the 12-month rolling throughput (in tons per 12-month rolling period) of cement and flyash for **S2.352.1, S2.352.2, and S2.352.3**, each, using the monthly recordkeeping in 5.e. above.
- g. Monitor and record the pressure drop and water flow rate through the Wet Scrubber WS-207 each day that **S2.352** is in operation.
- h. Maintain records on site of the optimal operating ranges of pressure drop and water flow rate for the Wet Scrubber WS-207. The Permittee will make available such records to the Director upon request. The optimal operating ranges will be determined by the Permittee, based on operating experience and the Wet Scrubber manufacturer's recommendations.
- i. Maintain records of monitoring data, compliance tests, and supporting information for a minimum of 5 years following the date of such measurements, reports or records pursuant to Section V.A. of this operating permit. The most recent 2 years will be retained on site and made available for inspection upon request by the Director.
- j. Conduct and record a Method 22 visible emissions test (excluding water vapor) on the exhaust stack of WS-207 on a monthly basis while operating. The Method 22 test shall be conducted as set forth in 40 CFR Part 60, Appendix A for a period of 6 minutes. If the Method 22 test detects any visible emission, the Permittee will conduct and record a Method 9 visible emissions test. Each Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.

**6. NAC 445B.3405 (NAC 445B.316) Part 70 Program**

**Recordkeeping**

- a. Permittee will maintain, in a contemporaneous log, the monitoring required in DT.5. above, including the calendar date of any required monitoring.



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Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee

**Section VI. Specific Operating Conditions (continued)**

DT. Emission Units # S2.352.1, S2.352.2, and S2.352.3 (continued)

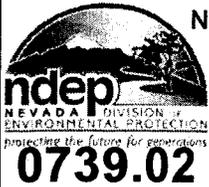
7. NAC 445B.3405 (NAC 445B.316) Part 70 Program Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections VI and VII of this operating permit.

8. NAC 445B.3405 (NAC 445B.316) Part 70 Program Shielded Requirements

No shielded requirements.



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**CLASS I AIR QUALITY OPERATING PERMIT  
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Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DU.Emission Unit #S2.353**

Location North 4,538.163 km, East 552.289 km, UTM (Zone 11)

**System 135 – Paste Backfill Plant Emergency Diesel Generator**

S	2.353	Emergency Diesel Generator – 1,500 kW (2,012 HP) – Model Year 2010
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Descriptive Stack Parameters

Stack Height (ft): 5.4

Stack Diameter (ft): 0.67

Stack Temperature (°F): 764

Exhaust Flow (ACFM): 11,061

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

**S2.353** has no add-on controls.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

a. **S2.353** may combust only diesel as the primary fuel.

b. On or before the date of startup of **S2.353**, Permittee will install, calibrate, operate, and maintain a fuel flow meter to monitor the amount of diesel fuel combusted in **S2.353**.

c. The maximum diesel fuel consumption rate for **S2.353** will not exceed 105 gallons per hour.

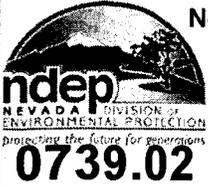
d. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR Part 60, Subpart IIII, with a displacement less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel (40 CFR 60.4207(b)). The diesel fuel sulfur limit for **S2.353** will not exceed 15 ppm by weight.

e. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205, as set forth in DS.3.h. of this section, according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine (40 CFR 60.4206).

f. If you (Permittee) are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)).

g. Hours

**S2.353** may operate up to 24 hours per day, but not more than 100 hours per year for non-emergency use.



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**Section VI. Specific Operating Conditions (continued)**

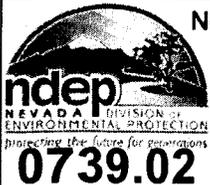
**DU. Emission Unit #S2.353 (continued)**

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Emission Limits

On and after the date of startup of **S2.353**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.353**, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.66 pound per hour, nor more than 0.03 ton per year.
- b. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.66 pound per hour, nor more than 0.03 ton per year.
- c. NAC 445B.2203 Federally Enforceable SIP Requirement - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.55 pound per MMBtu in accordance with NAC 445B.2203.
- d. NAC 445B.22047 Federally Enforceable SIP Requirement - The discharge of sulfur to the atmosphere will not exceed 10.15 pounds per hour in accordance with NAC 445B.22047.
- e. NAC 445B.305 Part 70 Program - The discharge of SO<sub>2</sub> to the atmosphere will not exceed 0.02 pound per hour, nor more than 0.001 ton per year.
- f. NAC 445B.305 Part 70 Program - The discharge of NO<sub>x</sub> + NMHC to the atmosphere will not exceed 21.16 pounds per hour, nor more than 1.06 ton per year.
- g. NAC 445B.305 Part 70 Program - The discharge of CO to the atmosphere will not exceed 11.57 pounds per hour, nor more than 0.58 ton per year.
- h. New Source Performance Standards (NSPS) – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) (40 CFR Part 60, Subpart IIII, 40 CFR 60.4200 et. seq.).
  - (1) The discharge of PM to the atmosphere will not exceed 0.2 g/kW-hr (40 CFR 60.4205(b), 60.4202(a)(2) - Tier 2 standards for engines > 560 kW, 40 CFR 89.112(a), Table 1).
  - (2) The discharge of NO<sub>x</sub> + NMHC (non-methane hydrocarbons) to the atmosphere will not exceed 6.4 g/kW-hr (40 CFR 60.4205(b), 60.4202(a)(2) - Tier 2 standards for engines > 560 kW, 40 CFR 89.112(a), Table 1).
  - (3) The discharge of CO to the atmosphere will not exceed 3.5 g/kW-hr (40 CFR 60.4205(b), 60.4202(a)(2) - Tier 2 standards for engines > 560 kW, 40 CFR 89.112(a), Table 1).
- i. National Emission Standards for Hazardous Air Pollutants (NESHAP) – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580 et. seq.) – New or Reconstructed stationary RICE located at an Area Source (40 CFR 6590(c)(1)). No further requirements under 40 CFR Part 63, Subpart ZZZZ apply to stationary RICE meeting the requirements of 40 CFR Part 60, Subpart IIII (40 CFR 63.6590(c)).
- j. NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the **S2.353** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DU. Emission Unit #S2.353 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of **S2.353**, Permittee will:

- a. Monitor and record the amount of diesel fuel combusted (in gallons) for **S2.353** on a daily basis, for each day that **S2.353** is operated.
- b. Monitor and record the hours of operation for **S2.353** during each day of operation.
- c. Maintain on site and make available upon request, certification by the fuel supplier that the sulfur content of the diesel fuel delivered to the Permittee for use in **S2.353** complies with the sulfur limit specified in DS.2.d. of this section.
- d. Monitor and record the average hourly fuel combustion rate determined using the monitoring in 4.a. and 4.b. above, for each day of operation.

5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping

- a. Permittee will maintain, in a contemporaneous log, the monitoring required in D.4. above, so as to include the calendar date of the required monitoring.

6. 40 CFR Part 60, Subpart IIII Compliance Requirements

- a. If you (Permittee) are an owner or operator and must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer (40 CFR 60.4211(a)).
- b. If you (Permittee) are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4202(a), as set forth in DS.3.h. of this section, you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications (40 CFR 60.4211(c)).
- c. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under 40 CFR 60.4205, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited (40 CFR 60.4211(e)).



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**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

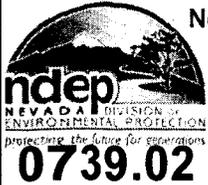
**DU. Emission Unit #S2.353 (continued)**

7. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections **VI** and **VII** of this operating permit.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

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**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee

**Section VI. Specific Operating Conditions (continued)**

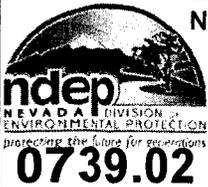
**DV. Emission Units #S2.354, PF1.510, and PF1.511**

S2.354 & PF1.510 Location North 4538.163 km, East 552.164 km, UTM (Zone 11)

PF1.511 Location North 4,538.154 km, East 552.155 km, UTM (Zone 11)

<b>System 136 – Rodeo Shotcrete Silo #2</b>		
S	2.354	110-Ton Rodeo Shotcrete Silo #2 – Loading (pneumatic or bucket elevator)
PF	1.510	110-Ton Rodeo Shotcrete Silo #2 – Discharge to Conveyor
PF	1.511	110-Ton Rodeo Shotcrete Silo #2 – Conveyor Discharge

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment (NAC 445B.3405 (NAC 445B.316))
  - a. Emissions from **S2.354** will be ducted, with 100% capture, to a control system consisting of a Vent Filter.
  - b. Emissions from **PF1.510** and **PF1.511**, each, will be controlled by an enclosure.
  
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput for **S2.354, PF1.510, and PF1.511**, each, will not exceed 80 tons of shotcrete per any one-hour period.
  - b. Total annual throughput for **S2.354, PF1.510, and PF1.511**, each, will not exceed 65,000 tons of shotcrete per 12-month rolling period.
  - c. Hours  
**S2.354, PF1.510, and PF1.511**, each, may operate up to 8,760 hours per calendar year.
  
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. NAC 445B.305 Part 70 Program  
On and after the date of startup of **S2.354**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.354**, the following pollutants in excess of the following specified limits:
    - (1) The discharge of PM to the atmosphere will not exceed 0.08 pound per hour, nor more than 0.03 ton per year.
    - (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.03 pound per hour, nor more than 0.01 ton per year.
    - (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 49.1 pounds per hour in accordance with NAC 445B.22033.
    - (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the **S2.354** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

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**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

**Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee**

**Section VI. Specific Operating Conditions (continued)**

**DV. Emission Units #S2.354, PF1.510, and PF1.511 (continued)**

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program (continued)  
Emission Limits (continued)

b. NAC 445B.305 Part 70 Program

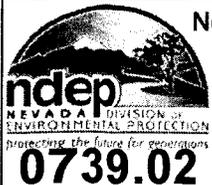
On and after the date of startup of **PF1.510** and **PF1.511**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.510** and **PF1.511**, the following pollutants in excess of the following specified limits:

- (1) The discharge of PM to the atmosphere will not exceed 0.19 pound per hour, nor more than 0.08 ton per year, each.
- (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.11 pound per hour, nor more than 0.05 ton per year, each.
- (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 49.1 pounds per hour, each, in accordance with NAC 445B.22033.
- (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the discharges **PF1.510** and **PF1.511**, each, will not equal or exceed 20% in accordance with NAC 445B.22017.

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of **S2.354**, **PF1.510**, and **PF1.511**, Permittee will:

- a. Monitor and record the daily weight of shotcrete loaded into **S2.354** and the duration of loading each day loading occurs.
- b. Monitor and record the amount of shotcrete discharged from **PF1.510** and **PF1.511**, each, on a monthly basis. The amount of shotcrete discharged will be based on purchasing receipts and measurements of the level of shotcrete in the silo at the beginning and end of the month. Level measurements will be made with sonic level detectors.
- c. Monitor and record the hours of operation of **PF1.510** and **PF1.511**, each, for each day of operation.
- d. Monitor and record the average loading and discharge rate (tons per hour) of shotcrete using the monitoring in 4.a., 4.b., and 4.c. above.
- e. Monitor and record the throughput (in tons) of shotcrete for **S2.354**, **PF1.510**, and **PF1.511** on a monthly basis.
- f. On a monthly basis, monitor and record the 12-month rolling throughput (in tons per 12-month rolling period) of shotcrete for **S2.354**, **PF1.510**, and **PF1.511**, each, using the monthly recordkeeping in 4.e. above.
- g. Conduct a weekly inspection of the Vent Filter control device for **S2.354**, in accordance with the manufacturer's operation and maintenance manual, and record the results (e.g. condition of filters and housing) and any corrective actions taken.
- h. Conduct and record a monthly inspection of the enclosure on **PF1.510** and **PF1.511** and record the results and any corrective action taken.
- i. Conduct and record a Method 22 visible emissions test (excluding water vapor) on the exhaust vent of **S2.354** and on the discharges of **PF1.510** and **PF1.511**, each, on a monthly basis while operating. The Method 22 tests shall be conducted as set forth in 40 CFR Part 60, Appendix A for a period of 6 minutes. If the Method 22 tests detect any visible emissions, the Permittee will conduct and record a Method 9 visible emissions test. Each Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**0739.02**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

**Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee**

**Section VI. Specific Operating Conditions (continued)**

**DV. Emission Units #S2.354, PF1.510, and PF1.511 (continued)**

5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping

- a. Permittee will maintain, in a contemporaneous log, the monitoring required in DV.4. above, including the calendar date of any required monitoring.

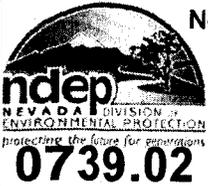
6. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections **VI** and **VII** of this operating permit.

7. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

No shielded requirements.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

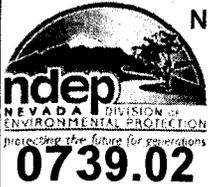
**DW. Emission Units PF1.512 and PF1.513**

PF1.512 Location North 4538.170 km, East 552.158 km, UTM (Zone 11)

PF1.513 Location North 4,538.157 km, East 552.158 km, UTM (Zone 11)

<b>System 137 – Rodeo Shotcrete Loadout Station #2</b>		
PF	1.512	Delivery Truck Discharge to Screw Conveyor
PF	1.513	Screw Conveyor Discharge

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment (NAC 445B.3405 (NAC 445B.316))
  - a. Emissions from **PF1.512 and PF1.513**, each, will be controlled by an enclosure.
  
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput for **PF1.512 and PF1.513**, each, will not exceed 80 tons of shotcrete per any one-hour period.
  - b. Total annual throughput for **PF1.512 and PF1.513**, each, will not exceed 65,000 tons of shotcrete per 12-month rolling period.
  - c. Hours  
**PF1.512 and PF1.513**, each, may operate up to 8,760 hours per calendar year.
  
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. NAC 445B.305 Part 70 Program  
On and after the date of startup of **PF1.512 and PF1.513**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.512 and PF1.513**, the following pollutants in excess of the following specified limits:
    - (1) The discharge of PM to the atmosphere will not exceed 0.19 pound per hour, nor more than 0.08 ton per year, each.
    - (2) The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.11 pound per hour, nor more than 0.05 ton per year, each.
    - (3) NAC 445B.22033 Federally Enforceable SIP Requirement – The maximum allowable discharge of PM<sub>10</sub> to the atmosphere will not exceed 49.1 pounds per hour, each, in accordance with NAC 445B.22033.
    - (4) NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from the **PF1.512 and PF1.513**, each, will not equal or exceed 20% in accordance with NAC 445B.22017.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DW. Emission Units #S2.354, PF1.510, and PF1.511 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of **PF1.512** and **PF1.513**, Permittee will:

- a. Monitor and record the amount of shotcrete discharged from **PF1.512** and **PF1.513**, each, on a monthly basis. The amount of shotcrete discharged will be based on purchasing receipts and measurements of the level of shotcrete in the silo at the beginning and end of the month. Level measurements will be made with sonic level detectors.
- b. Monitor and record the hours of operation of **PF1.512** and **PF1.513**, each, for each day of operation.
- c. Monitor and record the average loading and discharge rate (tons per hour) of shotcrete using the monitoring in 4.a., 4.b., and 4.c. above.
- d. Monitor and record the throughput (in tons) of shotcrete for **PF1.512** and **PF1.513** on a monthly basis.
- e. On a monthly basis, monitor and record the 12-month rolling throughput (in tons per 12-month rolling period) of shotcrete for **PF1.512** and **PF1.513**, each, using the monthly recordkeeping in 4.e. above.
- f. Conduct and record a monthly inspection of the enclosures on **PF1.512** and **PF1.513** and record the results and any corrective action taken.
- g. Conduct and record a Method 22 visible emissions test on the discharges of **PF1.512** and **PF1.513**, each, on a monthly basis while operating. The Method 22 tests shall be conducted as set forth in 40 CFR Part 60, Appendix A for a period of 6 minutes. If the Method 22 tests detect any visible emissions, the Permittee will conduct and record a Method 9 visible emissions test. Each Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A.

5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping

- b. Permittee will maintain, in a contemporaneous log, the monitoring required in DV.4. above, including the calendar date of any required monitoring.

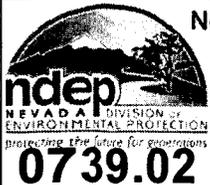
6. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Reporting

The Permittee will:

- a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
- b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
- c. 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 sections **VI** and **VII** of this operating permit.

7. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

No shielded requirements.



## BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0005 (DRAFT) Permit No. AP1041-

0739.02

### CLASS I AIR QUALITY OPERATING PERMIT SPECIFIC OPERATING REQUIREMENTS

Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee

#### Section VI. Specific Operating Conditions (continued)

##### DX. Emission Units S2.355 and S2.356

S2.355 Location North 4,538.3 km, East 551.8 km, UTM (Zone 11)

S2.356 Location North 4,536.2 km, East 554.9 km, UTM (Zone 11)

System 138 – Fuel Bay Gasoline Dispensing Facilities (GDFs)		
S	2.355	Contractor Fuel Bay Gasoline Storage Tank – 8,000-Gallon Capacity
S	2.356	Ledcor Fuel Bay Gasoline Storage Tank – 500-Gallon Capacity

S	2.355	Contractor Fuel Bay Gasoline Storage Tank – 8,000-Gallon Capacity
S	2.356	Ledcor Fuel Bay Gasoline Storage Tank – 500-Gallon Capacity

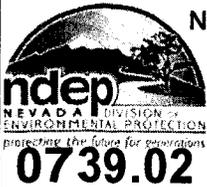
1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Equipment  
S2.355 and S2.356, each, shall be operated using submerged fill.
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. S2.355 and S2.356 may store gasoline only.
  - b. The maximum gasoline loading in to S2.355 and S2.356, combined, will not exceed 7,277 gallons per calendar month, nor more than 87,324 gallons per 12-month rolling period.
  - c. Hours  
S2.355 and S2.356, each, may operate up to 8,760 hours per calendar year.
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits

On and after the date of startup of S2.355 and S2.356, Permittee will not discharge or cause the discharge into the atmosphere from S2.355 and S2.356 the following pollutants in excess of the following specified limits:

  - a. NAC 445B.305 Part 70 Program - The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed 0.9 ton per year, combined, based on a 12-month rolling period.
  - b. NAC 445B.22017 Federally Enforceable SIP Requirement - The opacity from S2.355 and S2.356, each, will not exceed 20% in accordance with NAC 445B.22017.
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Monitoring

On and after the date of startup of S2.355 and S2.356, Permittee will:

  - a. Monitor and record the amount of gasoline, in gallons, loaded into, or dispensed from, S2.355 and S2.356, combined, on a monthly basis, as measured by fuel flow meters.
  - b. At the end of each calendar month, record the amount of gasoline (in gallons) loaded in to, or dispensed from, S2.355 and S2.356, combined, on a 12-month rolling basis.
5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Recordkeeping
  - a. Permittee will maintain, in a contemporaneous log, the monitoring required in DX.4. above, so as to include the calendar date of the required monitoring.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**0739.02**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: **BARRICK GOLDSTRIKE MINES, INC.**, as Permittee

**Section VI. Specific Operating Conditions (continued)**

**DX. Emission Units S2.355 and S2.356 (continued)**

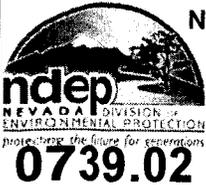
6. 40 CFR Part 63, Subpart CCCCCC – NESHAP for Gasoline Dispensing Facilities (40 CFR 63.11110 et. seq.)
  - a. **S2.355 and S2.356** are individual affected sources (40 CFR 63.11111(h), 40 CFR 63.11112(d)), each with a monthly throughput of less than 10,000 gallons of gasoline (63.11111(b)).
  - b. You (Permittee) must comply with the standards in Subpart CCCCCC no later than January 10, 2011 (40 CFR 63.11113(b)).
  - c. You (Permittee) must, at all times, 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 63.11115).
  - d. You (Permittee) must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
    - (1) Minimize gasoline spills (40 CFR 63.11116(a)(1)).
    - (2) Clean up spills as expeditiously as practicable (40 CFR 63.11116(a)(2)).
    - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use (40 CFR 63.11116(a)(3)).
    - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators (40 CFR 63.11116(a)(4)).
  - e. You (Permittee) must have records available within 24 hours of a request by the Administrator to document your gasoline throughput (40 CFR 63.11116(b)).
  - f. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with 6.d.(3) above (40 CFR 63.11116(d)).
  
7. NAC 445B.3405 (NAC 445B.316) Part 70 Program Reporting

The Permittee will:

  - a. Promptly report to the Director all deviations from the requirements of this Operating Permit; and
  - b. 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 and under **Section III.B** of this permit, or for reporting of an emergency (as defined by NAC 445B.326) under **Section I.I.** of this permit; and
  - c. 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 sections **VI** and **VII** of this operating permit.
  
8. NAC 445B.3405 (NAC 445B.316) Part 70 Program Shielded Requirements

No shielded requirements requested.

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



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**0739.02**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

**Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee**

**Section X. Amendments**

**June 30, 2008** - Minor Revision. Add specific operating conditions for pressure relief vents in System 19, Section VI.S. Remove "lime" from System 63 description. Add soda ash as a material that can be used in System 63, Section VIIA. Add new autoclave mixing tank, System 106, emission unit S2.319. PM and PM<sub>10</sub> emission limits will increase by 1.88 tons per year as a result of the addition of System 106. (Air Case #08AP0248).

**October 17, 2008** - Minor Revision. Change description for System 97 from "Intermediate Crushing System (Mill #1)" to "Intermediate Crushing System (Mill #1 & #2)". Change screen description for PF1.459 and PF1.460 (System 97) from double-deck screen to multi-deck screen. Remove 3 minute opacity requirement for System 97. Replace initial compliance demonstration in Section VI.DC.4 for PF1.483 through PF1.485 (System 103A) from 40 CFR Part 60 Subpart OOO requirements to 40 CFR Part 60 Subpart LL requirements (System 103A is subject to Subpart LL and not Subpart OOO). Add new crushing plant to permit, System 107, emission units PF1.486 through PF1.490. PM emission limits will increase by 8.10 tons per year and PM<sub>10</sub> emission limits will increase by 3.11 tons per year as a result of the addition of System 107. (Air Case #09AP0082).

**January 15, 2010** - Minor Revision: Update OP to include three notifications of change; add two inline coal size reduction equipment to System 17 - Roaster Circuit; add two crushers to System 71 - Metallurgical Laboratory Sample Preparation

**May 4, 2010** - Minor Revision (Air Case #10AP0226). Update OP to add two sulfur screw conveyors (S2.208.21 and S2.208.22) to System 17 (Roaster Circuit); allow addition of sulfur to System 18 - (Roaster Circuit); add six new systems for addition of sulfur prill to roasters (Systems 108 through 113).

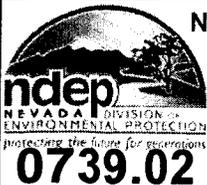
**October 7, 2010** - Change of location for Systems 49, 50, 59, 60, and 100. Description change for PF1.477 and PF1.478 (System 100). Air Case # 11AP0112

**October 11, 2010** - Minor Revision (Air Case #11AP0001). Add System 114 (Autoclave Circuit, emission units S2.321 through S2.323) to allow for processing ore under revised control system. Add System 115 (Cooling Tower, emission unit S2.324) to support System 114. PM emission limits will increase by 3.20 tons per year and PM<sub>10</sub> emission limits will increase by 3.20 tons per year.

**January 4, 2011** - Minor Revision (Air Case #11AP0090). Update language in Sections I-II-III-V of OP. Update OP to revise Roaster Sulfur Prill Addition System (revise Systems 108-110-111-112, remove System 109, add System 116). PM emission limits will decrease by 0.47 tons per year and PM<sub>10</sub> emission limits will decrease by 0.17 tons per year.

**January XX, 2012** - Minor Revisions, Air Cases 12AP0031 & 12AP0032 processed concurrently:

- (1) Add System 133A Paste Backfill Plant Cement Silo Loading.
- (2) Add System 133B Paste Backfill Plant Flyash Silo Loading.
- (3) Add System 134 Paste Backfill Plant Material Transfers.
- (4) Add System 135 Paste Backfill Plant Emergency Diesel Generator.
- (5) Add System 136 Rodeo Shotcrete Silo #2 Loading and Discharges
- (6) Add System 137 Rodeo Shotcrete Loadout Station.
- (7) Add System 138 - Contractor Fuel Bay and Leducor Gasoline Dispensing Facilities (GDF's), including the NESHAP Subpart CCCCCC.
- (8) Revise System 75, S2.082 (Gasoline Storage Tank) to include NESHAP Subpart CCCCCC provisions.
- (9) Revise the H<sub>2</sub>S hourly and annual emission limits for the autoclaves, Systems 66 and 114.
- (10) Add RATA provisions for the System 18 Roaster CEMS.



**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0005 (DRAFT) Permit No. AP1041-**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: BARRICK GOLDSTRIKE MINES, INC., as Permittee

**Section X. Amendments (continued)**

**This permit:**

1. Is non-transferable. (NAC 445B.287) Part 70 Program
2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318) (State Only Requirement)
3. Will expire and be subject to renewal five (5) years from July 17, 2007.  
(NAC 445B.315) Part 70 Program
4. A complete application for renewal of an operating permit must be submitted to the director on the form provided by him with the appropriate fee at least 240 calendar days before the expiration date of this operating permit. (NAC 445B.323.2) Part 70 Program
5. 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) (State Only Requirement)

THIS PERMIT EXPIRES ON: July 17, 2012

Signature \_\_\_\_\_

Issued by: Jeffrey Kinder, P.E.  
Supervisor, Permitting Branch  
Bureau of Air Pollution Control

Phone: (775) 687-9475 Date: DRAFT