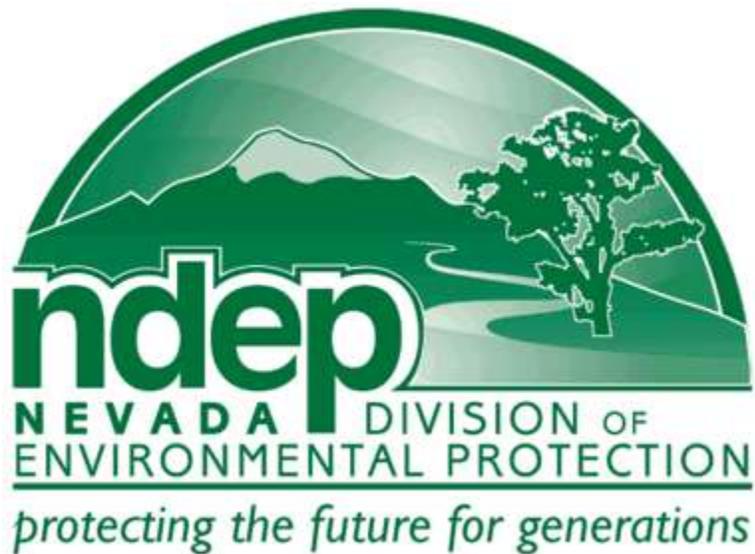


*Operating Permit
Application Packet for*

**Class I-A
Operating Permit**



*Prepared by
Division of Environmental Protection
Bureau of Air Pollution Control
Class I Permitting Branch
November 2011*

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State of Nevada
Division of Environmental Protection
Bureau of Air Pollution Control

APPLICATION FOR CLASS I OPERATING PERMIT

Please return to: Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class I Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701
(775) 687-9350 FAX (775) 687-6396

General Information

- This application is available from the Bureau of Air Pollution Control in a Microsoft Word file, or on the internet at <http://www.ndep.nv.gov/bapc>. All information required in the application may be computer generated and submitted to the Bureau on CD(s) or any suitable electronic media. In addition, one printed copy must be submitted.
- All information required by the "General Company Information" and by the relevant forms in Appendices 1 through 10 must be completed.
- The application filing fee required by NAC 445B.327 must be submitted with the completed application. The fee for a new PSD permit or major PSD modification is \$50,000. The fee for a new Class I Operating Permit is \$30,000. The fee for a significant revision is \$20,000. The fee for a renewal is \$5,000. Checks must be made payable to: Nevada State Treasurer, Environmental Protection.
- This application packet shall be used for new major sources, significant modifications and sources which become subject to Class I requirements after the effective date (January 11, 1997).
- Separate application forms for specific types of emission units are provided in Appendix 1. They include application forms for: (1) industrial processes, (2) combustion equipment, (3) storage silos, (4) liquid storage tanks and (5) surface area disturbances.
- An application for a Class I operating permit must be signed by a responsible official, as defined in NAC 445B.156. The certification/signature page is contained in Appendix 10.
- All items in the application must be addressed. If an item does not apply "N/A" or similar notation must be entered in the appropriate blank. All other information must be provided. Incomplete applications will be returned to the responsible official within 45 working days of receipt of the application packet.

**Application
for
Class I Air Quality
Operating Permit
(New, Significant Revision,
Renewal)**

GENERAL COMPANY INFORMATION

All applicants shall complete each item or explain in the space provided why no information is needed. Please specify "N/A" (Not Applicable) if necessary. The application will be returned to the applicant if it is deemed incomplete.

1. **COMPANY NAME AND ADDRESS THAT ARE TO APPEAR ON THE OPERATING PERMIT** [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

2. **Owner's Name and Address** [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

3. **Source Name and Mailing Address, if different from #1** [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

4. **Name and Address of Owner's Agent** [NAC 445B.295.1]

(Name)

(Address)

(City)

(State)

(Zip Code)

5. **Physical Location of Stationary Source** [NAC 445B.295.8]: (if no physical address, describe location, e.g., 4 miles south of I-80 at xx Interchange)

Township(s)

Range(s)

Section(s)

GENERAL COMPANY INFORMATION (CONTINUED)

6. **Plant Manager or Other Appropriate Contact** [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

(Telephone#)

(FAX #)

(E-mail address)

7. **Responsible Official Name, Title and Address** [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

(Telephone#)

(FAX #)

(E-mail address)

8. **If records required under the operating permit will be kept at a location other than the source, specify that location** [NAC 445B.295.7].

(Name)

(Address)

(City)

(State)

(Zip Code)

GENERAL COMPANY INFORMATION (CONTINUED)

9. This application is submitted for (please check appropriate boxes below):

- A new Class I Operating Permit**
 - This application is for a source subject to PSD requirements (40 CFR § 52.21).
 - This application is for a source subject to the following NSPS requirements (40 CFR § 60):

- This application is for a source subject to the following NESHAP requirements (40 CFR § 63):
Subpart EEEEEEE - National Emission Standards for Hazardous Air Pollutants:
Gold Mine Ore Processing and Production Area Source Category

- A significant modification of an existing Class I Operating Permit**
 - This application is for a source subject to PSD requirements (40 CFR § 52.21).
 - This application is for a source subject to the following NSPS requirements (40 CFR § 60):

- This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

- The renewal of an existing Class I Operating Permit**
 - This application is for a source subject to PSD requirements (40 CFR § 52.21).
 - This application is for a source subject to the following NSPS requirements (40 CFR § 60):

- This application is for a source subject to the following NESHAP requirements (40 CFR § 63):

10. The application must contain, if applicable:

- a. For a proposed new major source, or a proposed significant modification to an existing stationary source which is not subject to the provisions of 40 CFR §52.21, include all information as required by NAC 445B.308 to 445B.313, inclusive [NAC 445B.3368.3(b)].
- b. For stationary sources subject to the provisions regarding new source review set forth in 42 USC §§7501 - 7515, inclusive (nonattainment areas), all information required by 42 USC §7503 [NAC 445B.3363.2(b)(3)].
- c. For a proposed new major source or a proposed significant modification to an existing stationary source that is subject to the provisions of 40 CFR §52.21, include all information required by 40 CFR §52.21 [NAC 445B.3368.3(a)].
- d. For a proposed new major source or a proposed significant modification to an existing stationary source which is subject to the requirements of 42 USC §7412 regarding hazardous air pollutants, include all information required by NAC 445B.308 to 445B.313, inclusive [NAC 445B.3368.3(c)].

11. Will the construction occur in more than one phase? Yes No

12. If the construction will occur in more than one phase, please provide the projected date of the commencement for each phase of construction:

Phase 1: _____
Phase 2: _____
Phase 3: _____

GENERAL COMPANY INFORMATION (CONTINUED)

13. For a new source or modification of a stationary source, provide a Compliance Assurance Monitoring (CAM) plan for all emission units subject to the monitoring requirements of 40 CFR Part 64. For significant revisions provide a CAM plan for those emission units for which a significant revision to the operating permit is requested and which is required pursuant to the monitoring requirements of 40 CFR Part 64. If a CAM plan is not required, provide an explanation. [NAC 445B.295.8]
14. Compliance Plan/Certification
 - a. Attach a compliance plan, signed by the responsible official, that contains the following with respect to all applicable requirements:
 - (1) A narrative description of the compliance status of the stationary source with respect to all applicable requirements. [NAC 445B.3368.2(h)(1)]
 - (2) A compliance certification by a responsible official stating that the stationary source will comply in a timely manner with any new applicable requirements that become effective during the operating permit term. Include a description of the test methods and the requirements for monitoring, enhanced monitoring, recordkeeping and reporting that will be used to comply with the new applicable requirements, fuel use, the rate of production, raw materials, and operating schedules which are used to determine the compliance status of the stationary source. [NAC 445B.3368.2(h)(2)]
 - (3) If the stationary source is not in compliance with any applicable requirements at the time the operating permit is issued, include a narrative description and a proposed schedule for achieving compliance which includes remedial measures, an enforceable sequence of actions with milestones, and a schedule to submit certified progress reports every six months. This schedule must be at least as stringent as that contained in any consent decree rendered by a federal court, a court of this state, or an administrative order which applies to the stationary source. [NAC 445B.3368.2(h)(3)III]
 - b. A schedule for submission of compliance certifications during the term of the operating permit, to be submitted annually or more frequently to the Bureau of Air Pollution Control. [NAC 445B.3368.2(i)(3)]
15. **Application Submittal:**

Please remove the cover page, Table of Contents and General Information page and all Attachments of the application packet. Submit the remainder of the application packet as your formal application. This should consist of, at a minimum, the Class I-A Application cover page, the general Company Information, and Appendices 1 through 10.

Appendix 1

EMISSION UNIT APPLICATION FORMS

**(Industrial Process/Combustion Equipment/Storage Silo/
Liquid Storage Tank/ Surface Area Disturbance)**

Instructions

PLEASE RESPOND SEPARATELY TO ITEMS 1 through 8 FOR EACH EMISSION UNIT, as appropriate. Each emission unit at the stationary source must be identified by completion of the appropriate application form contained in this appendix. Forms may be duplicated as needed. Complete all applicable attachments (**Appendix 1**) included in this application package [NAC 445B.295].

- Section 1. Equipment Description: Provide information about the Standard Industrial Classification Code (SIC), describe the processes and products by SIC, including any associated with an alternative operating scenario identified in this application, model number, manufacture date, dimensions and UTM coordinates. [NAC 445B.295.3]
- Section 2. Design Rate/Operating Parameters: Describe all production rates, operating schedules and materials used in the process. [NAC 445B.295.3]
- Section 3. Fuel Usage: Describe all fuels and fuel usage. [NAC 445B.295.3]
- Section 4. Pollution Control Equipment/Exhaust Stack Parameters: Identify and describe all air pollution control equipment. [NAC 445B.295.4]
- Section 5. Compliance Monitoring Devices and Activities: Identify and describe any equipment for the control of air pollution and any devices or activities for monitoring compliance with emission limitations. [NAC 445B.295.4]
- Section 6. Work Practice Standards: provide information on limitations on the operation or any standards for work practices which affect emissions for all regulated air pollutants. [NAC 445B.295.5].
- Section 7. Requested Emission Limits: Provide the requested emission limits for each emission unit. Include emission rates of all regulated air pollutants that are subject to an emissions limitation pursuant to an applicable requirement. The emission rates must be described in pounds per hour and tons per year and in such terms as are necessary to establish compliance using the applicable standard reference test method. [NAC 445B.295.8, NAC 445B.3363(d)]
- Section 8. Applicable Requirements, Test Methods, and Compliance Status: One copy of Section 8 is provided following the Liquid Storage Tank Application. Please complete a copy of Section 8 for **each individual application form completed**. [NAC 445B.3363.1(g), 445B.3363.1(h)]

Alternative Operating Scenarios: Complete a separate application form for each emission unit having an alternative operating scenario. (*A common example of an alternative operating scenario is a steam boiler that utilizes natural gas as the primary fuel, but may combust diesel fuel as an alternate fuel source*). Please check the box in the upper right hand corner of each application form for emission units requesting an alternative operating scenario. Additionally, for each emission unit application form requesting an alternative operating scenario:

1. Define each alternative operating scenario [NAC 445B.296.1(a)];
2. Demonstrate that each scenario will comply with each applicable requirement or relevant requirement of NAC 445B.001 to 445B.3497, inclusive [NAC 445B.296.1(b)];
3. Detail proposed conditions, including monitoring and recordkeeping for each alternative operating scenario, which will ensure compliance. Contemporaneous log entries must be provided every time the source changes from one scenario to another [NAC 445B.296.1(c)].
4. Provide emission rates and detailed calculations for each alternative operating scenario in Appendix 4 [NAC 445B.296.1(d)].

Surface Area Disturbance

Complete a Surface Area Disturbance application form for any land disturbances that equal or exceed 5 acres. (*Note: The submittal of a dust control plan is required for each surface area disturbance, as specified in Appendix 7. Please provide the dust control plan in Appendix 7.*)

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other	NA				

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section must be completed)

- Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: Actual cubic feet per minute		
Gas volume flow rate: Dry standard cubic feet per minute		
Unusual stack characteristics (e.g. rain cap, horizontal discharge)		

- Complete for emissions not exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary)

- (Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

* Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

¹ A list of Hazardous Air Pollutants is contained in Attachment 4.

² Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status												
<p>NAC 445B.2203 (<i>State Only Requirement</i>) Emissions of Particulate Matter - Fuel Burning Equipment</p> <p>1. Source may not cause or permit the emission of PM₁₀ resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas:</p> <p>a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat.</p> <p>b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$</p> <p>c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$</p> <p>2. For the purposes of paragraphs b and c of subsection 1:</p> <p>a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(1)(a) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table:</p> <table style="margin-left: 40px;"> <tr> <td style="padding-right: 20px;">Heat input in millions of Up to and including</td> <td>Maximum allowable emission of particulate matter in pounds per hour per million</td> </tr> <tr> <td>10.....</td> <td>0.600</td> </tr> <tr> <td>100.....</td> <td>0.352</td> </tr> <tr> <td>1,000.....</td> <td>0.206</td> </tr> <tr> <td>10,000.....</td> <td>0.091</td> </tr> <tr> <td>100,000.....</td> <td>0.025</td> </tr> </table>	Heat input in millions of Up to and including	Maximum allowable emission of particulate matter in pounds per hour per million	10.....	0.600	100.....	0.352	1,000.....	0.206	10,000.....	0.091	100,000.....	0.025			
Heat input in millions of Up to and including	Maximum allowable emission of particulate matter in pounds per hour per million														
10.....	0.600														
100.....	0.352														
1,000.....	0.206														
10,000.....	0.091														
100,000.....	0.025														
<p>SIP 445.731(1)(b) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$</p> <p>Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(1)(c) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$</p> <p>where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(3) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.</p>															

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22033, 445B.22027 (<i>State Only Requirement</i>) <u>Emissions of Particulate Matter - Sources Not Otherwise Limited</u></p> <ol style="list-style-type: none"> 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour. 			
<p>SIP 445.732 - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section.</p> <p>SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67} (4.10P^{0.67})$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>SIP 445.732 (3) - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11} - 18.14 (55P^{0.11} - 40)$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>NAC 445B.2204, 445B.22043, 445B.22047 (<i>State Only Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u></p> <ol style="list-style-type: none"> 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: $Y = 0.7X$ 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, $Y = 0.4X$ Solid Fuel, $Y = 0.6X$ Combination, $Y = (L(0.4) - S(0.6))/(L + S)$ 4. For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: <ol style="list-style-type: none"> (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel. 			

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status			
<p>SIP Article 8.1 and 8.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u> 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: $Y = 1.26X \text{ (} Y = 0.7X \text{)}$ "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.</p>						
<p>SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"><u>Liquid Fuel</u> $Y = 0.7X \text{ (} Y = 0.4X \text{)}$</td> <td style="width: 33%; border: none;"><u>Solid Fuels</u> $Y = 1.1X \text{ (} Y = 0.6X \text{)}$</td> <td style="width: 33%; border: none;"><u>Combination Fuel</u> $Y = \frac{L(0.7) + S(1.1)}{L + S}$</td> </tr> </table> <p>"X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel.</p> <p>8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.</p>	<u>Liquid Fuel</u> $Y = 0.7X \text{ (} Y = 0.4X \text{)}$	<u>Solid Fuels</u> $Y = 1.1X \text{ (} Y = 0.6X \text{)}$	<u>Combination Fuel</u> $Y = \frac{L(0.7) + S(1.1)}{L + S}$			
<u>Liquid Fuel</u> $Y = 0.7X \text{ (} Y = 0.4X \text{)}$	<u>Solid Fuels</u> $Y = 1.1X \text{ (} Y = 0.6X \text{)}$	<u>Combination Fuel</u> $Y = \frac{L(0.7) + S(1.1)}{L + S}$				
<p>NAC 445B.2204, 445B.22043, 445B.2205 (<i>State Only Requirement</i>) <u>Other Processes Which Emit Sulfur</u> 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.</p>						
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904} \text{ (} 0.292P^{0.904} \text{)}$ When E is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.</p>						
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.</p>						

**SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS**

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22017 (<u>State Only Requirement</u>) <u>Maximum Opacity of Emissions</u></p> <p>1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:</p> <p>(a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60.</p> <p>(b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).</p> <p>2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.</p>			
<p>SIP 445.721 (<u>Federally Enforceable SIP Requirement</u>) <u>Visible Emissions from Stationary Sources</u></p> <p>These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.</p>			
<p>Class II Operating Permit (Cite Permit #)</p>			
<p>Nevada Mercury Air Emission Control Program NAC 445B.3611 to 445B.3689 (Cite Permit #)</p>			
<p>NESHAP Subpart EEEEEEE – National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category 40CFR63.11640 to 63.11653</p>			

**COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS I-A**

Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

- a. Type of equipment: _____
- b. Standard Industrial Classification (SIC) Code: _____
- c. Manufacturer of equipment: _____
- d. Model number: _____ Serial number: _____ *Equip. number: _____
- e. Date equipment manufactured: _____
- f. Please check one: Temporary (At the same location for less than 12 months)
 Stationary (At the same location for more than 12 months)
- g. Please check if portable: Portable (transportable or movable within the confines of the stationary source)
- h. UTM Coordinates: _____ meters N: _____ meters E; Zone 11
(Please specify NAD 27 or NAD 83)
- i. Basic equipment dimensions (feet): L: _____ W: _____ H: _____

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

- a. **Maximum** design horsepower **OUTPUT** (horsepower per hour): _____
(Please provide for internal combustion engines only)
- b. **Maximum** design heat **INPUT** (million Btu per hour): _____
(Please provide for all combustion units except for internal combustion engines)
- c. *Requested operating time: time of day _____ to: _____

Hours per day: _____ Days per year: _____ Hours per year: _____

* Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 3 - Fuel Usage

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
No. 2 Fuel Oil	gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario, please specify primary fuel and percentage on a maximum hourly and annual basis. If fuel blending is the primary fuel, identify percentages of each fuel blended. Attach additional information to this form if necessary.

*Firing of waste oil will require multi-metals test to ensure fuel is non-hazardous.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section must be completed.

- Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: actual cubic feet per minute		
Gas volume flow rate: dry standard cubic feet per minute		
Unusual stack characteristics (e.g., rain cap, horizontal discharge)		

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary)

- (Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

* Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

¹ A list of Hazardous Air Pollutants is contained in Attachment 4.

² Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status												
<p>NAC 445B.2203 (<i>State Only Requirement</i>) Emissions of Particulate Matter - Fuel Burning Equipment</p> <p>1. Source may not cause or permit the emission of PM₁₀ resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas:</p> <p>a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat.</p> <p>b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$</p> <p>c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$</p> <p>2. For the purposes of paragraphs b and c of subsection 1:</p> <p>a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(1)(a) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table:</p> <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">Heat input in millions of Up to and including</th> <th style="text-align: left;">Maximum allowable emission of particulate matter in pounds per hour per million</th> </tr> </thead> <tbody> <tr> <td>10.....</td> <td>0.600</td> </tr> <tr> <td>100.....</td> <td>0.352</td> </tr> <tr> <td>1,000.....</td> <td>0.206</td> </tr> <tr> <td>10,000.....</td> <td>0.091</td> </tr> <tr> <td>100,000.....</td> <td>0.025</td> </tr> </tbody> </table>	Heat input in millions of Up to and including	Maximum allowable emission of particulate matter in pounds per hour per million	10.....	0.600	100.....	0.352	1,000.....	0.206	10,000.....	0.091	100,000.....	0.025			
Heat input in millions of Up to and including	Maximum allowable emission of particulate matter in pounds per hour per million														
10.....	0.600														
100.....	0.352														
1,000.....	0.206														
10,000.....	0.091														
100,000.....	0.025														
<p>SIP 445.731(1)(b) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$</p> <p>Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(1)(c) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>For heat inputs equal to or greater than 4,000 million Btu's per hour, the emissions shall be calculated by using the following equation: $Y = 17.0X^{-0.568}$</p> <p>where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(3) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.</p>															

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22033, 445B.22027 (<i>State Only Requirement</i>) <u>Emissions of Particulate Matter - Sources Not Otherwise Limited</u></p> <ol style="list-style-type: none"> 1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. 2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ 3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ 4. For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> (a) "E" means the maximum rate of emission in pounds per hour. (b) "P" means the maximum allowable throughput in tons per hour. 			
<p>SIP 445.732 - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u> Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section.</p> <p>SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67} (4.10P^{0.67})$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>SIP 445.732 (3) - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u> When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11} - 18.14 (55P^{0.11} - 40)$ "E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>NAC 445B.2204, 445B.22043, 445B.22047 (<i>State Only Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u></p> <ol style="list-style-type: none"> 1. Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. 2. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: $Y = 0.7X$ 3. Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, $Y = 0.4X$ Solid Fuel, $Y = 0.6X$ Combination, $Y = (L(0.4) - S(0.6))/(L + S)$ 4. For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> (a) "X" means the operating input of heat in millions of Btu's per hour. (b) "Y" means the allowable rate of emission of sulfur in pounds per hour. 5. For the purposes of subsection 3: <ol style="list-style-type: none"> (a) "L" means the percentage of total input of heat derived from liquid fuel. (b) "S" means the percentage of total heat derived from solid fuel. 			

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status						
<p>SIP Article 8.1 and 8.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u> 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: $Y = 1.26X \text{ (} Y = 0.7X \text{)}$ "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.</p>									
<p>SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><u>Liquid Fuel</u></td> <td style="width: 33%;"><u>Solid Fuels</u></td> <td style="width: 33%;"><u>Combination Fuel</u></td> </tr> <tr> <td>$Y = 0.7X \text{ (} Y = 0.4X \text{)}$</td> <td>$Y = 1.1X \text{ (} Y = 0.6X \text{)}$</td> <td>$Y = \frac{L(0.7) + S(1.1)}{L + S}$</td> </tr> </table> <p>"X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel.</p> <p>8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.</p>	<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>	$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$			
<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>							
$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$							
<p>NAC 445B.2204, 445B.22043, 445B.2205 (<i>State Only Requirement</i>) <u>Other Processes Which Emit Sulfur</u> 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904} \text{ (} 0.292P^{0.904} \text{)}$ When E is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.</p>									

**SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS**

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22017 (<u>State Only Requirement</u>) <u>Maximum Opacity of Emissions</u></p> <p>1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:</p> <p>(a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60.</p> <p>(b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).</p> <p>2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.</p>			
<p>SIP 445.721 (<u>Federally Enforceable SIP Requirement</u>) <u>Visible Emissions from Stationary Sources</u></p> <p>These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.</p>			
<p>Class II Operating Permit (Cite Permit #)</p>			
<p>Nevada Mercury Air Emission Control Program NAC 445B.3611 to 445B.3689 (Cite Permit #)</p>			
<p>NESHAP Subpart EEEEEEE – National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category 40CFR63.11640 to 63.11653</p>			

**STORAGE SILO
APPLICATION FORM
CLASS I-A**

Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

- a. Type of equipment: _____
- b. Standard Industrial Classification (SIC) Code: _____
- c. Manufacturer of equipment: _____
- d. Model number: _____ Serial number: _____ *Equip. number: _____
- e. Date equipment manufactured: _____
- f. Please check one: Temporary (At the same location for less than 12 months)
 Stationary (At the same location for more than 12 months)
- g. Please check if portable: Portable (transportable or movable within the confines of the stationary source)
- h. UTM Coordinates: _____ meters N: _____ meters E; Zone 11
(Please specify NAD 27 or NAD 83)
- i. Basic equipment dimensions (feet): L: _____ W: _____ H: _____

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

- a. Maximum design storage capacity (tons): _____
- b. Maximum loading rate (tons per hour): _____ Loading time (hours to fill) : _____
- c. *Requested loading rate (tons per hour): _____
*Hours per day: _____ Days per year: _____ Hours per year: _____
- d. Maximum unloading rate (tons per hour): _____
- e. Method of unloading (screw auger, etc.): _____
- f. Continuous or batch discharge: _____
- g. Requested unloading rate (tons per hour): _____
Requested unloading rate (tons per year): _____
- h. Requested unloading time: Hours per day: _____ Time of day: _____ to: _____
Hours per day: _____ Days per year: _____ Hours per year: _____
- i. Material type processed (lime, cement, flyash, etc.) : _____

* Note: Please complete if other than the maximum loading rate (tons per hour), and/or the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

Section 3 -Reserved

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment (this section must be completed)

- Complete for emissions exhausting through a silo stack, chimney or vent during silo loading process: (baghouse, wet scrubber, cyclone, no control, etc.)

	Control #1	Control #2
Type of Control: (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: actual cubic feet per minute		
Gas volume flow rate: dry standard cubic feet per minute		
Unusual stack characteristics (e.g., raincap, horizontal discharge)		

- Complete for emissions exhausting through a silo stack, chimney or vent during silo unloading process: (baghouse, wet scrubber, cyclone, no control, etc.)

	Control #1	Control #2
Type of Control: (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: actual cubic feet per minute		
Gas volume flow rate: dry standard cubic feet per minute		
Unusual stack characteristics (e.g., raincap, horizontal discharge)		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment (continued)

-Complete for emissions not exhausting through a stack during silo unloading process: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary)

- (Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 7 - Requested Emission Limits - Silo Loading

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

* Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

¹ A list of Hazardous Air Pollutants is contained in Attachment 4.

² Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 7 (continued) - Requested Emission Limits - Silo Unloading

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

* Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

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SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status												
<p>NAC 445B.2203 (<i>State Only Requirement</i>) Emissions of Particulate Matter - Fuel Burning Equipment</p> <p>1. Source may not cause or permit the emission of PM₁₀ resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas:</p> <p>a. For input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat.</p> <p>b. For input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{-0.231}$</p> <p>c. For input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation: $Y = 17.0X^{-0.568}$</p> <p>2. For the purposes of paragraphs b and c of subsection 1:</p> <p>a. "X" means the operating rate in million Btu's per hour. b. "Y" means the allowable rate of emission in pounds per million Btu's.</p>															
<p>SIP 445.731(1)(a) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Source shall not cause, suffer, allow or permit the emission of particulate matter resulting from the combustion of fuel in excess of the quantity set forth in the following table:</p> <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">Heat input in millions of Up to and including</th> <th style="text-align: left;">Maximum allowable emission of particulate matter in pounds per hour per million</th> </tr> </thead> <tbody> <tr> <td>10.....</td> <td>0.600</td> </tr> <tr> <td>100.....</td> <td>0.352</td> </tr> <tr> <td>1,000.....</td> <td>0.206</td> </tr> <tr> <td>10,000.....</td> <td>0.091</td> </tr> <tr> <td>100,000.....</td> <td>0.025</td> </tr> </tbody> </table>	Heat input in millions of Up to and including	Maximum allowable emission of particulate matter in pounds per hour per million	10.....	0.600	100.....	0.352	1,000.....	0.206	10,000.....	0.091	100,000.....	0.025			
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<p>SIP 445.731(1)(b) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>For heat inputs greater than 10 but less than 4,000 million Btu's per hour, the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{-0.231}$</p> <p>Where "X" = maximum equipment capacity rate in million Btu's per hour. "Y" = allowable rate of emission in pounds per million Btu's.</p>															
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<p>SIP 445.731(3) - (<i>Federally Enforceable SIP Requirement</i>) Particulate Matter - Fuel Burning Equipment</p> <p>Air conditioning equipment or fuel burning equipment having a rating of less than one million kilogram-calories (4 million Btu's) per hour shall be exempted from provisions of this section.</p>															

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<p>NAC 445B.22033, 445B.22027 (<i>State Only Requirement</i>) <u>Emissions of Particulate Matter - Sources Not Otherwise Limited</u></p> <ol style="list-style-type: none"> Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> "E" means the maximum rate of emission in pounds per hour. "P" means the maximum allowable throughput in tons per hour. 			
<p>SIP 445.732 - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section.</p> <p>SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67} (4.10P^{0.67})$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>SIP 445.732 (3) - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11} - 18.14 (55P^{0.11} - 40)$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>NAC 445B.2204, 445B.22043, 445B.22047 (<i>State Only Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u></p> <ol style="list-style-type: none"> Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: $Y = 0.7X$ Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, $Y = 0.4X$ Solid Fuel, $Y = 0.6X$ Combination, $Y = (L(0.4) - S(0.6))/(L + S)$ For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> "X" means the operating input of heat in millions of Btu's per hour. "Y" means the allowable rate of emission of sulfur in pounds per hour. For the purposes of subsection 3: <ol style="list-style-type: none"> "L" means the percentage of total input of heat derived from liquid fuel. "S" means the percentage of total heat derived from solid fuel. 			

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status						
<p>SIP Article 8.1 and 8.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u> 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: $Y = 1.26X \text{ (} Y = 0.7X \text{)}$ "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.</p>									
<p>SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><u>Liquid Fuel</u></td> <td style="width: 33%;"><u>Solid Fuels</u></td> <td style="width: 33%;"><u>Combination Fuel</u></td> </tr> <tr> <td>$Y = 0.7X \text{ (} Y = 0.4X \text{)}$</td> <td>$Y = 1.1X \text{ (} Y = 0.6X \text{)}$</td> <td>$Y = \frac{L(0.7) + S(1.1)}{L + S}$</td> </tr> </table> <p>"X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel.</p> <p>8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.</p>	<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>	$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$			
<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>							
$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$							
<p>NAC 445B.2204, 445B.22043, 445B.2205 (<i>State Only Requirement</i>) <u>Other Processes Which Emit Sulfur</u> 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904} \text{ (} 0.292P^{0.904} \text{)}$ When E is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.</p>									

**SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS**

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22017 (<u>State Only Requirement</u>) <u>Maximum Opacity of Emissions</u></p> <p>1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:</p> <p>(a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60.</p> <p>(b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h).</p> <p>2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.</p>			
<p>SIP 445.721 (<u>Federally Enforceable SIP Requirement</u>) <u>Visible Emissions from Stationary Sources</u></p> <p>These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.</p>			
<p>Class II Operating Permit (Cite Permit #)</p>			
<p>Nevada Mercury Air Emission Control Program NAC 445B.3611 to 445B.3689 (Cite Permit #)</p>			
<p>NESHAP Subpart EEEEEEE – National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category 40CFR63.11640 to 63.11653</p>			

**LIQUID STORAGE TANK
APPLICATION FORM
CLASS I-A**

Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

a. Manufacturer of tank _____

b. SIC Code _____ c. Liquid Stored _____

d. Date of installation _____

e. Tank Dimensions:
Shell height (feet) _____ Shell diameter (feet) _____
Liquid height (feet) _____ Average liquid height (feet) _____
Volume (gallons) _____

f. Paint characteristics:
Shell color/shade (please check one) White/white Aluminum/specular
 Aluminum/diffuse Gray/light Gray/medium Red/primer
Shell condition _____

g. Roof color/shade (please check one) White/white Aluminum/specular
 Aluminum/diffuse Gray/light Gray/medium Red/primer
Roof condition _____

h. Roof characteristics: Type (please check one):
 Cone Dome External floating roof Internal floating roof
For cone or dome roof, specify height (feet) _____
For cone roof, specify slope (ft/ft) _____
For dome roof, specify radius (feet) _____
Tank construction: welded riveted
Primary rim seal: vapor-mounted liquid-mounted mechanical shoe
Secondary seal: weather shield rim-mounted none
Roof type: pontoon double deck
Roof fittings: access hatch gauge-float well gauge-hatch/sample well
 rim vent roof drains roof leg
 un-slotted guide pole wells vacuum breaker
 slotted guide pole/sample wells

j. For internal floating roof, please complete the following:
Primary seal: resilient foam-filled wiper seals other (please specify) _____
Secondary seal: resilient foam-filled wiper seals other (please specify) _____
Roof fittings: access hatch gauge-float well gauge-hatch/sample well
 rim vent roof drains roof leg
 un-slotted guide pole wells slotted guide pole/sample wells
 vacuum breaker column wells (# of columns _____)
 Ladder wells stub drains

k. True vapor pressure of liquid (psia) _____

l. Reid vapor pressure of liquid (psi) _____

m. UTM Coordinates _____ meters N; _____ meters E; Zone 11
(Please specify NAD 27 or NAD 83)

**LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED**

Section 2 - Operating Parameters

a. Maximum throughput (gallons per year) _____
b. Method of filling (submerged fill) _____

Section 3 - Reserved

Section 4 - Pollution Control Equipment (this section *must* be completed)

- Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, internal floating roof, no control, etc.)

	Control #1	Control #2
Type of Control: (Specify "uncontrolled" if no pollution control device is installed)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: actual cubic feet per minute		
Gas volume flow rate: dry standard cubic feet per minute		
Unusual stack characteristics (e.g., raincap, horizontal discharge)		

Note 1: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED**

Section 5 - Identify and Describe Compliance Monitoring Devices or Activities (attach additional pages if necessary)

(Eg., Emissions from this unit will be monitored by CEMS for NO_x and CO. Emissions for all other pollutants will be monitored periodically by annual stack test, daily opacity readings using Method 9 with weekly O&M baghouse checks and daily ΔP readings.)

Section 6 - Identify and Describe Work Practice Standards, Etc. (attach additional pages if necessary)

(Eg., 1. At all times, including startup, shutdown and malfunction, the emission unit will be operated in a manner consistent with good air pollution control practices.
2. Water spray nozzles will be checked to verify proper operation and adequate water flow is present.)

**LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED**

Section 7 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour*)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
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Lead			
Hydrogen Sulfide			
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Other Regulated Pollutants (Specify ²)			

* Note: Alternative emissions limitations (e.g., lb/MMBtu, ppm, grains/dscf) may be requested by the applicant. If alternative emissions limitations are requested, please clearly describe the units in column 2 of Section 5 above.

¹ A list of Hazardous Air Pollutants is contained in Appendix 4.

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<p>NAC 445B.22033, 445B.22027 (<i>State Only Requirement</i>) <u>Emissions of Particulate Matter - Sources Not Otherwise Limited</u></p> <ol style="list-style-type: none"> Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 4.10P^{0.67}$ When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharge per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$ For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> "E" means the maximum rate of emission in pounds per hour. "P" means the maximum allowable throughput in tons per hour. 			
<p>SIP 445.732 - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>Sources not otherwise included in these regulations (SIP) shall not cause, suffer, allow, or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in this section.</p> <p>SIP 445.732(2) - When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 0.0193P^{0.67} (4.10P^{0.67})$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>SIP 445.732 (3) - (<i>Federally Enforceable SIP Requirement</i>) <u>Particulate Matter - Industrial Sources</u></p> <p>When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E = 11.78P^{0.11} - 18.14 (55P^{0.11} - 40)$</p> <p>"E" = Maximum rate of emission in kilograms (pounds) per hour. "P" = Process weight rate in kilograms (tons) per hour.</p>			
<p>NAC 445B.2204, 445B.22043, 445B.22047 (<i>State Only Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u></p> <ol style="list-style-type: none"> Source may not cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3. Where an emission unit has a total input of heat of less than 250 million Btu's per hour the allowable emission must be calculated by the use of the following equation: $Y = 0.7X$ Where an emission unit has a total input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equation: Liquid fuel, $Y = 0.4X$ Solid Fuel, $Y = 0.6X$ Combination, $Y = (L(0.4) - S(0.6))/(L + S)$ For the purposes of subsections 2 and 3: <ol style="list-style-type: none"> "X" means the operating input of heat in millions of Btu's per hour. "Y" means the allowable rate of emission of sulfur in pounds per hour. For the purposes of subsection 3: <ol style="list-style-type: none"> "L" means the percentage of total input of heat derived from liquid fuel. "S" means the percentage of total heat derived from solid fuel. 			

SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status						
<p>SIP Article 8.1 and 8.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Sulfur Emissions - Fuel Burning Equipment</u> 8.2.1.1 - Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu's) per hour the following allowable emission shall be calculated by the use of the following equation: $Y = 1.26X \text{ (} Y = 0.7X \text{)}$ "X" = Operating heat input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emission in kg (pounds) per hour.</p>									
<p>SIP Article 8.2.1.2 - Where a source located on contiguous property has a total heat input of equal to or greater than 63 million kg-cal (250 million Btu's) per hour, the allowable sulfur emission shall be calculated by the use of the following equations:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><u>Liquid Fuel</u></td> <td style="width: 33%;"><u>Solid Fuels</u></td> <td style="width: 33%;"><u>Combination Fuel</u></td> </tr> <tr> <td>$Y = 0.7X \text{ (} Y = 0.4X \text{)}$</td> <td>$Y = 1.1X \text{ (} Y = 0.6X \text{)}$</td> <td>$Y = \frac{L(0.7) + S(1.1)}{L + S}$</td> </tr> </table> <p>"X" = Operating input in millions of kg-cal (Btu's) per hour. "Y" = Allowable rate of sulfur emissions in kg (pounds) per hour. "L" = Percentage of total heat input derived from liquid fuel. "S" = Percentage of total heat input derived from solid fuel.</p> <p>8.2.2 - For purposes of Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.</p>	<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>	$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$			
<u>Liquid Fuel</u>	<u>Solid Fuels</u>	<u>Combination Fuel</u>							
$Y = 0.7X \text{ (} Y = 0.4X \text{)}$	$Y = 1.1X \text{ (} Y = 0.6X \text{)}$	$Y = \frac{L(0.7) + S(1.1)}{L + S}$							
<p>NAC 445B.2204, 445B.22043, 445B.2205 (<i>State Only Requirement</i>) <u>Other Processes Which Emit Sulfur</u> 1. Source may not cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid, or gaseous fuel, in excess of the quantity determined by the following equation: $E = 0.292P^{0.904}$ 2. For the purposes of subsection 1: (a) "E" means the allowable sulfur emission in pounds per hour. (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(1) - Source shall not cause, suffer, allow or permit the emission of sulfur compounds where the sulfur originates in the material being processed (excluding sulfur from solid, liquid, or gaseous fuel), in excess of the quantity determined by the following equation: $E = 0.271P^{0.904} \text{ (} 0.292P^{0.904} \text{)}$ When E is equal to or greater than 5 kilograms (10 pounds) per hour. Where: "E" is the allowable sulfur emission in kilograms (pounds) per hour, "P" is the total feed sulfur in kilograms (pounds) per hour. SIP 445.746(1) - When "E" is less than 5 kilograms (10 pounds) per hour, the gas stream concentration shall not exceed 1,000 ppm by volume.</p>									
<p>SIP 445.746 - (<i>Federally Enforceable SIP Requirement</i>) <u>Other Sulfur Emitting Processes</u> SIP 445.746(3) - When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions shall be the sum of those allowed by the provisions of this section.</p>									

**SECTION 8
EMISSION UNIT SPECIFIC
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS**

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22017 (<u>State Only Requirement</u>) <u>Maximum Opacity of Emissions</u> 1. Except as otherwise provided in this section and NAC 445B.2202 and 445B.22023, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods: (a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A. of 40 C.F.R. Part 60. (b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. §60.13(h). 2. The provisions of this section and NAC 445B.2202 and 445B.22023 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.</p>			
<p>SIP 445.721 (<u>Federally Enforceable SIP Requirement</u>) <u>Visible Emissions from Stationary Sources</u> These regulations (SIP) shall not apply if the presence of uncombined water is the only reason for the failure of an emission to comply with these regulations. The burden of proof to establish the application of this exemption shall be upon the person seeking to come within this exemption.</p>			
<p>Class II Operating Permit (Cite Permit #)</p>			
<p>Nevada Mercury Air Emission Control Program NAC 445B.3611 to 445B.3689 (Cite Permit #)</p>			
<p>NESHAP Subpart EEEEEEE – National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category 40CFR63.11640 to 63.11653</p>			

**SURFACE AREA DISTURBANCE
APPLICATION FORM
CLASS I OPERATING PERMIT**

1. Project Name _____

2. Surface Area Disturbance Location:

Overall disturbance location description:

Township _____; Range _____; Section _____;

3. Indicate the total number of acres to be disturbed for the project _____

4. Nevada Administrative Code 445B.22037 requires fugitive dust to be controlled (regardless of the size or amount of acreage disturbed), and requires an ongoing program, using best practical methods, to prevent particulate matter from becoming airborne. All activities which have the potential to adversely affect the local air quality must implement all appropriate measures to limit controllable emissions. Appropriate measures for dust control may consist of a phased approach to acreage disturbance rather than disturbing the entire area all at once; using wet suppression through such application methods as water trucks or water sprays systems to control windblown dust; the application of soil binding agents or chemical surfactant to roadways and areas of disturbed soil; as well as the use of wind-break or wind-limiting fencing designed to limit wind erosion of soils.

5. Please include a dust control plan in Appendix 8 if the total number of acres to be disturbed in number 3 above equals or exceeds 20 acres. The dust control measures discussed above should be considered in the preparation of the required dust control plan. Two documents entitled "SAD Dust Control Plan Preparation Guidelines" and "SAD Fugitive Dust Control Plan" can be downloaded at www.ndep.nv.gov/bapc under Downloads. The acceptance of the dust control plan by the Bureau of Air Pollution Control does not limit the permit holder's need to control fugitive dust from the disturbance and its related activities, nor from putting into effect an ongoing program for using the best practical methods of dust control.

Appendix 2

INSIGNIFICANT ACTIVITY INFORMATION FORM

Instructions

Attachment 1 contains the Approved List of Insignificant Activities. Attachment 3 contains the List of Trivial Activities. Trivial activities are exempted from consideration. **PLEASE RESPOND ON THE INSIGNIFICANT EMISSION UNITS INFORMATION FORM TO SECTIONS 1 THROUGH 4, FOR EACH INSIGNIFICANT EMISSION UNIT** [NAC 445B.295.8].

- Section 1. List all insignificant activities that are exempt pursuant to NAC 445B.288.2(a) through (h), and list the appropriate section that provides for the exemption. Provide information sufficient to show that the exemption applies (a copy of NAC 445B.288.2 is provided in Attachment 2).
- Section 2. List all insignificant activities that are exempted because they are on the list approved and maintained by the Director pursuant to NAC 445B.288.4. Provide information sufficient to show that the exemption applies.
- Section 3. List all proposed insignificant activities that are not already contained in the list in Attachment 1. Provide sufficient description of activities, and all emission calculations and references. The list of proposed insignificant activities must also be submitted, under separate cover, to the Director for his review and approval.
- Section 4. List all De Minimis Units pursuant to NAC 445B.3657 approved by the Director that have a total emission limit of 5.0 lbs/yr for the facility. If the facility has been issued a Nevada Mercury Control Operating Permit, the facility will be required to list the units that have been approved as De Minimis Units. The facility must calculate the total potential to emit of mercury.
- Section 5. Calculate the maximum uncontrolled emissions for insignificant activities listed under Sections 1 through 3. Emissions calculations must be based on the maximum design throughput, maximum design production rate, maximum design heat input rate value, no controls, and 8760 hours per year of operation, unless otherwise indicated in NAC 445B.288.2 or on the list of approved insignificant activities provided in Attachment 1.

Section 1 - List All Emission Units that are Insignificant Activities Pursuant to NAC 445B.288.2(a) through (h) (see Attachment 2 for regulation).

Emission Unit	Exemption Regulation (Example - NAC	Reason Exemption Applies

Section 2 - List All Emission Units Proposed as Insignificant Activities Pursuant to List Approved by the Director (see Attachment 1 - List of Approved Insignificant Activities)

Emission Unit	Reason Exemption Applies

Section 3 - List All Emission Units Proposed as Insignificant Activities and Not Otherwise Listed in Section 1 or Section 2 (NAC 445B.288.4). Proposed insignificant activities from this Section must be submitted, under separate cover, to the Director for his approval. The submittal must include a sufficient description of the emission unit(s), all emissions calculations, and references.

Emission Unit

Appendix 3

FACILITY-WIDE APPLICABLE REQUIREMENTS

Instructions

Complete Table 1 provided in Appendix 3. Table 1 contains the general applicable requirements for the facility. In addition provide the following:

1. List, describe and cite all specific applicable requirements as defined in NAC 445B.019 (e.g., SIP, NAC, NSPS, NESHAPS, 112(r), acid rain, stratospheric ozone, etc.). [NAC 445B.3363.1(g)]
2. Explain any proposed exemption from any specific applicable requirement. [NAC 445B.295.1(f)]
3. Describe methods for determining compliance with each specific applicable requirement. [NAC 445B.295.2(g)]

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>Nevada Revised Statute (NRS) 445B.470 (<u>State Only Requirement</u>) <u>Prohibited Acts</u> Source shall not knowingly:</p> <ol style="list-style-type: none"> 1. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information; 2. Fail to pay any fee; 3. Falsify any material statement, representation or certification in any notice or report; or 4. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions. 			
<p>NAC 445B.22013 (<u>State Only Requirement</u>) <u>Prohibited Discharge</u> Source shall not cause or permit the discharge into the atmosphere from any stationary source of any hazardous air pollutant or toxic regulated air pollutant that threatens the health and safety of the general public, as determined by the director.</p>			
<p>NAC 445B.225 (<u>State Only Requirement</u>) <u>Prohibited Conduct: Concealment of Emissions</u> Source shall not install, construct, or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.</p>			
<p>State Implementation Plan (SIP) Article 2.2 (<u>Federally Enforceable State Implementation Plan (SIP) Requirement</u>) <u>Circumvention</u> 2.2.1 - Except for the sole purpose of reducing the odor of an emission, Source shall not install, construct, or use any device which conceals any emission without resulting in a reduction in the total release of air contaminants to the atmosphere.</p>			
<p>NAC 445B.326.1 (445.7133.1) (<u>Federally Enforceable Part 70 Program</u>) <u>Assertion of Emergency as Affirmative Defense to Action for Noncompliance</u> Source may assert an affirmative defense to an action brought for noncompliance with a technology-based emission limitation contained in the Operating Permit if the holder of the Operating Permit demonstrates through signed, contemporaneous operating logs or other relevant evidence that:</p> <ol style="list-style-type: none"> a. An emergency occurred as defined in 445B.056 and the holder of the Operating Permit can identify the cause of the emergency; b. The facility was being properly operated at the time of the emergency; c. During the emergency, the holder of the Operating Permit took all reasonable steps to minimize excess emissions; and d. The holder of the Operating Permit submitted notice of the emergency to the director within 2 working days after the emergency. The notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken to restore the normal operation of the facility. 			
<p>NAC 445B.315.2.h (445.7112.2.h) (<u>Federally Enforceable Part 70 Program</u>) Source shall provide the Bureau of Air Quality, within a reasonable time, with any information that the Bureau of Air Quality requests in writing to determine whether cause exists for modifying, revoking and reissuing, reopening and revising or terminating this Operating Permit or to determine compliance with the conditions of this Operating Permit.</p>			
<p>NAC 445B.315.i (445.7145, 445.7112.2.i) (<u>Federally Enforceable Part 70 Program</u>) Source shall pay fees to the Bureau of Air Quality in accordance with the provisions set forth in NAC 445B.327 and 445B.331.</p>			
<p>NAC 445B.315.2.k (445.7112.2.k) (<u>Federally Enforceable Part 70 Program</u>) A responsible official of Source shall certify that, based on information and belief formed after reasonable inquiry, the statements made in any document required to be submitted by any condition of an Operating Permit are true, accurate and complete.</p>			

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

<p align="center">Applicable Requirement Citation and Description</p>	<p align="center">Explanation of A Proposed Exemption</p>	<p align="center">Test Methods and/or Monitoring</p>	<p align="center">Compliance Status</p>
<p>40 CFR 52.21(r)(4) <i>(Federally Enforceable PSD Program)</i> At such time that Source becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of 40 CFR Part 52.21 shall apply to the source or modification as though construction had not yet commenced on the source or modification.</p>			
<p><u>(NAC 445B.252) (State Only Requirement)</u> <u>Testing and Sampling</u></p> <ol style="list-style-type: none"> 1. To determine compliance with NAC 445B.001 (445.430) to 445B.395 (445.846), inclusive, before the approval or the continuance of an Operating Permit or similar class of permits, the director may either conduct or order the owner of any stationary source to conduct or have conducted such testing and sampling as the director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial startup of the facility and at such times as may be required by the director. 2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the director: <ol style="list-style-type: none"> a. Specifies or approves, in specific cases, the use of a method of reference with minor changes in methodology; b. Approves the use of an equivalent method; c. Approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific stationary source is in compliance; or d. Waives the requirement for tests of performance because the owner or operator of a stationary source has demonstrated by other means to the director's satisfaction that the affected facility is in compliance with the standard. 3. Tests of performance must be conducted under such conditions as the director specifies to the operator of the plant based on representative performance of the affected facility. The owner or operator shall make available to the director such records as may be necessary to determine the conditions of the 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. 4. The owner or operator of an affected facility shall give notice to the director 30 days before the test of performance to allow the director to have an observer present. A written testing procedure for the test of performance must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures. 5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions, or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the director's approval. 6. All testing and sampling will be performed in accordance with recognized methods as specified by the director. 7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power, and other pertinent allied facilities as may be required and specified in writing by the director must be provided and paid for by the owner of the stationary source. 8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the director no later than 60 days after the testing or sampling, or both. 			

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

<p align="center">Applicable Requirement Citation and Description</p>	<p align="center">Explanation of A Proposed Exemption</p>	<p align="center">Test Methods and/or Monitoring</p>	<p align="center">Compliance Status</p>
<p>SIP Article 2.6 (<i>Federally Enforceable SIP Requirement</i>) <u>Testing and Sampling</u> 2.6.1 - To determine compliance with these regulations prior to approval of or prior to the continuance of an operating permit or similar class of permits, the Director may either conduct or order the owner of any source to conduct or have conducted such testing and sampling as the Director determines necessary.</p> <p>2.6.2 - Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Director.</p> <p>2.6.3 - Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, or (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director's satisfaction that the affected facility is in compliance with the standard.</p> <p>2.6.4 - Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.</p> <p>2.6.5 - The owner or operator of an affected facility shall provide the Director 30 days prior notice of the performance test to afford the Director the opportunity to have an observer present.</p> <p>2.6.6 - Each performance test shall consist of at least two separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs shall apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions, or other circumstances with less than two valid samples being obtained, an additional performance test(s) must be conducted.</p> <p>2.6.7 - All testing and sampling will be performed in accordance with recognized methods as specified by the Director.</p> <p>2.6.8 - The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power, and other pertinent allied facilities as may be required and specified in writing by the Director shall be provided and paid for by the owner of the source.</p> <p>2.6.9 - All information and analytical results of testing and sampling shall be certified as to their truth and accuracy and as to their compliance with all provisions of these (SIP) regulations and copies of these results shall be provided to both the owner and Director.</p>			
<p>NAC 445B.22067 (<i>State Only Requirement</i>) <u>Open Burning</u> The open burning of any combustible refuse, waste, garbage, oil, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in NAC 445B.22067.2.</p>			
<p>SIP Article 5.1 (<i>Federally Enforceable SIP Requirement</i>) <u>Open Burning</u> The open burning of any combustible refuse, waste, garbage, oil fires, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in SIP Articles 5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4 and 5.2.5.</p>			

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>NAC 445B.22087 (<i>State Only Requirement</i>) <u>Odors</u> Source may not discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents comfortable enjoyment of life or property.</p>			
<p>SIP Article 10 (<i>Federally Enforceable SIP Requirement</i>) <u>Odors</u> 10.1.1 - Source shall not discharge, or cause to be discharged from any source any material or air contaminant which is, or tends to be, offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property.</p>			
<p>NAC 445B.22093 (<i>State Only Requirement</i>) <u>Organic Solvents and Other Volatile Compounds</u> 1. Solvents or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizers, and manure must be processed, stored, used, and transported in such a manner and by such means as to minimize the tendency to evaporate, leak, escape, or be otherwise discharged into the ambient air causing or contributing to air pollution. If methods of control are available and feasible effectively to reduce the contribution to air pollution from evaporation, leakage, or discharge, as determined by the director, the installation and use of such methods, devices, or equipment for control is mandatory. 2. Source may not place, store, or hold in any new reservoir, stationary tank or other container with a capacity equal to or greater than 40,000 gallons any gasoline, petroleum distillate, or other volatile organic compound having a vapor pressure of 1.5 lb/square inch absolute or greater under actual storage conditions unless the tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent loss of vapor or gas to the atmosphere or is equipped with one of the following devices properly installed, in good working order, and in operation: a. A floating roof which consists of a pontoon type or double-deck roof which rests on the surface of the liquid contents and is equipped with a seal to close the space between the roof eave and tank wall or a vapor balloon or a vapor dome designed in accordance with accepted standards of the petroleum industry. This control equipment is not permitted if the gasoline or petroleum distillate has a vapor pressure of 11 lb/square inch absolute or greater under actual conditions. All gauging and sampling devices for tanks must be gas tight except when gauging or sampling is taking place. b. Other equipment proven to be of equal efficiency for preventing discharge of gases and vapors to the atmosphere. 3. Any tank for the storage of any other petroleum or volatile organic compound which is constructed or extensively remodeled on or after November 7, 1975, must be equipped with a submerged fill pipe or the equivalent, as approved by the director, for control of emissions. 4. All facilities for dock loading of products consisting of petroleum or other volatile organic compounds having a vapor pressure of 1.5 lb/square inch absolute or greater at loading pressure must have facilities for submerged filling by submerged fill pipe or an acceptable equivalent, for the control of emissions.</p>			
<p>SIP Article 9 (<i>Federally Enforceable SIP Requirement</i>) <u>Organic Solvent, other Volatile Compounds</u> 9.1 - Materials such as, but not limited to, solvents or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizers, and manure shall be processed, stored, used, and transported in such a manner and by such means as to minimize the tendency to evaporate, leak, escape, or be otherwise discharged into the ambient air causing or contributing to air pollution; and where control methods are available and feasible effectively to reduce the contribution to air pollution from evaporation, leakage, or discharge, as determined by the Director, the installation and use of such control methods, devices, or equipment shall be mandatory.</p>			

**TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS**

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>SIP Article 9.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons)</u> 9.2.1 - Source shall not place, store, or hold in any new reservoir, stationary tank or other container any gasoline, petroleum distillate, or other volatile organic compound having a vapor pressure of 1,055 kilograms per square meter (1.5 lb/square inch absolute) or greater (under actual storage conditions) unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent vapor or gas loss to the atmosphere or is equipped with one of the following vapor loss control devices (see 9.2.1, 9.2.1.2) properly installed, in good working order, and in operation.</p> <p>9.2.1.1 - A floating roof which consists of a pontoon type or double-deck roof which rests on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof eave and tank wall; or a vapor balloon or a vapor dome, designed in accordance with accepted standards of the petroleum industry. This control equipment shall not be permitted if the gasoline or petroleum distillate has a vapor pressure of 7,734 kilograms (11 lb/square inch absolute) or greater under actual conditions. All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place.</p> <p>9.2.1.2 - Other equipment proven to be of equal efficiency for preventing discharge of gases and vapors to the atmosphere.</p>			
<p>SIP Article 9.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons)</u> (Continued) 9.2.2 - Any other petroleum or volatile organic compound storage tank which is constructed or extensively remodeled, on or after the effective date of these regulations, shall be equipped with submerged fill pipe or equivalent, as approved by the Director for control of emissions.</p>			
<p>SIP Article 9.2 (<i>Federally Enforceable SIP Requirement</i>) <u>Storage Containers Equal to or Greater than 150 kiloliters (40,000 Gallons)</u> (Continued) 9.2.3 - All facilities for dock loading of petroleum or volatile organic compound products, having a vapor pressure of 1,055 kilograms per square meter (1.5 pounds per square inch absolute) or greater at loading pressure, shall provide for submerged filling by a submerged fill pipe or acceptable equivalent for the control of emissions</p>			
<p>NAC 445B.22037 (<i>State Only Requirement</i>) <u>Fugitive Dust</u></p> <ol style="list-style-type: none"> 1. Source may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne. 2. Except as otherwise provided in subsection 4, Source may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation. 3. Except as provided in subsection 4, Source may not disturb or cover 5 acres or more of land or its topsoil until he has obtained an Operating Permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land. 4. The provisions of subsections 2 and 3 do not apply to: <ol style="list-style-type: none"> a. Agricultural activities occurring on agricultural land; or b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres. 			

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
<p>SIP Article 7.3 (<i>Federally Enforceable SIP Requirement</i>) <u>Fugitive Dust</u> 7.3.1 - Source shall not cause or permit the handling, transporting, or storing of any material in a manner which allows, or may allow, controllable particulate matter to become airborne.</p> <p>7.3.2 - In areas designated by the Director, Source shall not cause or permit the construction, repair, or demolition work, or the use of unpaved or untreated areas without applying all such measures as may be required by the Director to prevent particulate matter from becoming airborne.</p> <p>7.3.3 - Source may not disturb or cover 8 hectares (20 acres) or more of land or its topsoil, except for agricultural land until Source obtains a registration certificate or operating permit for the purpose of clearing, excavating or leveling such land or any foreign material to fill or cover such land.</p>			
<p>NAC 445B.227 (445.664) <i>Federally Enforceable Part 70 Program</i> <u>Facilities Operation</u> Source may not:</p> <ol style="list-style-type: none"> 1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of this Operating Permit is installed and operating. 2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of this Operating Permit. 			
<p>The following provisions are applicable requirements of this Operating Permit:</p> <ol style="list-style-type: none"> 1. Source will comply with all applicable provisions of: <ol style="list-style-type: none"> a. 40 CFR Part 60.1 - 60.19 - Standards of Performance for New Stationary Sources - General Provisions; b. 40 CFR Part 61.01 - 61.19 - National Emission Standards for Hazardous Air Pollutants - General Provisions; c. 40 CFR Part 61.140 - 61.157 - National Emission Standards for Asbestos; d. 40 CFR Part 63.1 - 63.15 - National Emission Standards for Hazardous Air Pollutants for Source Categories - General Provisions; e. 40 CFR Part 70 - State Operating Permit Program. 			
<p>Source is subject to 40 CFR Part 68 - Chemical Accident Prevention Provisions. Source shall submit a risk management plan (RMP) by June 21, 1999, or other dates specified in 40 CFR 68.10. Source shall certify compliance with these requirements as part of the annual compliance certification as required by 40 CFR Part 70.</p>			
<p>Source will comply with all provisions of 40 CFR Part 82. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158. Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.</p>			
<p><u>Chemical Accident Prevention Provisions</u> Source shall:</p> <ol style="list-style-type: none"> 1. Submit a compliance schedule for meeting the requirements of 40 CFR Part 68.215 by the date provided in 40 CFR Part 68.10(a) or; 2. Submit as part of the compliance certification submitted under 40 CFR Part 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68.215, including the registration and submission of the risk management plan. 			

TABLE 1
APPLICABLE REQUIREMENTS, TEST METHODS, AND COMPLIANCE STATUS

Applicable Requirement Citation and Description	Explanation of A Proposed Exemption	Test Methods and/or Monitoring	Compliance Status
Source is not in compliance with NAC 445B.230 - Plan for reduction of emissions. In order to achieve compliance Source shall submit a plan for reducing or eliminating emissions associated with the stationary source in accordance with the episode stages of alert, warning, and emergency as contained in the applicable State Implementation Plan for the State of Nevada. The plan must be submitted on or before July 1, 1998.			
Class II Operating Permit (Cite Permit #)			
Nevada Mercury Air Emission Control Program NAC 445B.3611 to 445B.3689 (Cite MOPTC Permit #)			
NESHAP Subpart EEEEEEE – National Emission Standards for Hazardous Air Pollutants: Gold Mine Ore Processing and Production Area Source Category 40CFR63.11640 to 63.11653 (<i>Federal Requirement</i>)			

Appendix 4

STREAMLINING AND SHIELD ALLOWANCE

The incorporation of streamlining and a shield allowance is optional.

Use as a guideline the examples in this Appendix to identify and streamline multiple applicable requirements for an emission unit, if desired.

1. Provide a side-by-side comparison of all requirements included in the streamlining proposal that are currently applicable and effective for the specific emission unit.
2. Determine the most stringent emissions and/or performance standard and provide the documentation relied upon to make this determination.
3. Propose one set of permit terms and conditions (i.e. the streamlined requirements) to include the most stringent emissions limitations and/or standards.
4. Certify compliance with applicable requirements.

System 1	
S2.001	(Make) Boiler, Model ##, Serial ##

**** Company Name - Facility Name ** - Comparison of Applicable Requirements**

System #1 - (Make) Boiler S2.001					
	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Air Pollution Control Technology	<p>[] 60.40c Applicability and delegation of authority. FR Update 5/08/96 (a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).</p> <p><i>(HWAD has determined that this boiler was constructed at HWAD Main Base prior to June 9, 1989, and has not been modified or reconstructed since that date. Therefore, the provisions of 60.40c do not currently apply to this boiler.)</i></p>	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Emission Limitations	Not Applicable	<p>445B.362 Fuel-burning equipment 1. No person may cause or permit the emission of PM₁₀ resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas:</p> <p>(b) For input of heat greater than 10 million Btu/hr per hour, but less than or equal to 4,000 million Btu/hr per hour, the allowable emissions must be calculated using the following equation: $Y = 1.02X^{0.231}$</p> <p>2. For the purposes of paragraphs (b) and (c) of subsection 1: (a) [X] means the operating rate in million Btu/hr per hour. (b) [Y] means the allowable rate of emission in pounds per million Btu/hr.</p> <p><i>(Resultant PM₁₀ Maximum Emissions Allowable: Y = 0.50 pounds per million Btu/hr, or 11.03 pounds per hour, based on the maximum input heat rate value of 22.1 MMBtu/hr, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>445B.362 Fuel-burning equipment This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.</p>	<p>Article 7.1 Fuel Burning Equipment Article 7.1.1.1 For heat inputs greater than 10 but less than 4,000 million Btu/hr per hour the allowable emissions shall be calculated by using the following equation: $Y = 1.02X^{0.231}$</p> <p><i>(Resultant PM Maximum Emissions Allowable: Y = 0.50 pounds per million Btu/hr, or 11.03 pounds per hour, based on the maximum input heat rate value of 22.1 MMBtu/hr, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>VI.A.2. Emission Limits a. The discharge of PM (particulate matter) to the atmosphere will not exceed 0.32 pound per hour, nor more than 1.38 tons per year. b. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.16 pound per hour, nor more than 0.69 ton per year.</p>

** Company Name - Facility Name ** - Comparison of Applicable Requirements

System #1 - (Make) Boiler S2.001

	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Emission Limitations (Continued)	Not Applicable	<p>445B.373 Fuel-burning equipment</p> <p>1. No person may cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas in subsection 2 or 3:</p> <p>2. Where an emission unit has a total input of heat of less than 250 million Btu/s per hour the allowable emission must be calculated by the use of the following equation:</p> $Y = 0.7X$ <p>For the purposes of this subsection: (a) [X] means the operating input of heat in millions of Btu/s per hour (b) [Y] means the allowable rate of emission of sulfur in pounds per hour.</p> <p>(Resultant Sulfur Maximum Emissions Allowable: Y = 15.47 pounds per hour based on the maximum input heat rate value of 22.1 MMBtu/hr.</p> <p><i>This unit is being limited to a maximum fuel sulfur content of 0.05% and an emission limit of 0.56 pound per hour. Therefore, the resulting permitted maximum emissions allowable is well below the maximum allowed from this formula, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>445B.373 Fuel-burning equipment</p> <p>This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.</p>	<p>Article 8 - Sulfur Emissions</p> <p>No person shall cause, suffer, allow or permit the emission of sulfur compounds caused by the combustion of fuel in excess of the quantity set forth in the following table:</p> <p>Article 8.2.1.1 Where a source located on contiguous property has a total heat input of less than 63 million kg-cal (250 million Btu/s) per hour the allowable emission shall be calculated by the use of the following equation:</p> $Y = 0.7X$ <p>X = Operating input in millions of kg-cal (Btu/s) per hour. Y = Allowable rate of sulfur emissions in kg (pounds) per hour.</p> <p>(Resultant Sulfur Maximum Emissions Allowable: Y = 15.47 pounds per hour based on the maximum input heat rate value of 22.1 MMBtu/hr.</p> <p><i>This unit is being limited to a maximum fuel sulfur content of 0.05% and an emission limit of 0.56 pound per hour. Therefore, the resulting permitted maximum emissions allowable is well below the maximum allowed from this formula, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>VI.A.2. Emission Limits</p> <p>c. The discharge of sulfur to the atmosphere will not exceed 0.56 pound per hour, nor more than 2.45 tons per year.</p> <p>VI.A.3. Operating Parameters</p> <p>c. The maximum sulfur content of the #2 diesel fuel will not exceed 0.05 weight percent sulfur.</p>
Emission Limitations (Continued)	Not Applicable	<p>445B.354 Maximum opacity of emissions</p> <p>1. Unless otherwise provided in NAC 445B.354 to 445B.357, inclusive, no owner or operator may cause or permit the discharge into the atmosphere from any stationary source of any regulated air pollutant for a period or periods aggregating more than 3 minutes in any 1 hour which is of an opacity equal to or greater than 20 percent.</p>	<p>445B.354 Maximum opacity of emissions</p> <p>This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.</p>	<p>Article 4 -Visible Emissions From Stationary Sources</p> <p>Article 4.1-Unless otherwise provided herein, no person shall cause, suffer, allow, or permit the discharge into the atmosphere, from any stationary source, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is of an opacity equal to or greater than 20 percent.</p>	<p>VI.A.2. Emission Limits</p> <p>i. The opacity from the S2.001 stack discharge will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one-hour period.</p>
Operating Parameters	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.

** Company Name - Facility Name ** - Comparison of Applicable Requirements					
System #1 - (Make) Boiler S2.001					
	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Work Practice Standard(s)	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Testing and Sampling	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Monitoring	PART 60 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES SUBPART A General Provisions	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Recordkeeping	See Monitoring Above.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Reporting	See Monitoring above.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Summary of Shielded Requirements	None.	445B.362 Fuel-burning equipment 445B.373 Fuel-burning equipment 445B.354 Maximum opacity of emissions	445B.362 Fuel-burning equipment 445B.373 Fuel-burning equipment 445B.354 Maximum opacity of emissions	Article 7.1.1.1 Article 8.2.1.1 Article 4.1 -Visible Emissions From Stationary Sources	5. <u>Shielded Requirements</u> Compliance with conditions A.1. through A.4. of this section shall be deemed to be compliance with the applicable requirements specified below, as of the issuance date of this operating permit. Permit Requirements (AP9711-0117, issuance date 6/23/95) - Section III.B.2. Emission Limits, a. through f. NAC Requirements (Version dated 1/97) - 445B.362 (Fuel-burning equipment); 445B.373 (Fuel-burning equipment); 445B.354.1 (Maximum opacity of emissions) Applicable SIP Requirements (Version dated 1981) - Article 7.1.1.1 (Fuel Burning Equipment); Article 8.2.1.1 (Sulfur Emissions); Article 4.1 - (Visible Emissions From Stationary Sources)

System #2					
S2.001 - (Make) Transfer of Primary Crushed Ore Model ##, Serial ##					
** Company Name - Facility Name ** - Comparison of Applicable Requirements					
System #2 - (Make) Transfer of Primary Crushed Ore S2.001					
	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Air Pollution Control Technology	No Specific Requirements	No Specific Requirements	No Specific Requirements	No Specific Requirements	No Specific Requirements
Emission Limitations	<p>§ 60.382 Standard for particulate matter. (a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any stack emissions that:</p> <p>(1) Contain particulate matter in excess of 0.05 grams per dry standard cubic meter.</p> <p>Note: 0.05 grams/dscm is approx. equal to 0.0218 grains/dscf</p>	<p>445B.363-Sources not otherwise limited</p> <p>1. Owners or operators of stationary sources not otherwise included in NAC 445B.360 to 445B.367, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3.</p> <p>2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharged per hour must be determined by using the following equation: $E=4.10P^{0.67}$</p> <p>3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharged per hour must be determined by using the following equation: $E=55P^{0.11-40}$</p> <p>4. For the purpose of subsections 2 and 3:</p> <p>(a) [E] means the maximum rate of emission in pounds per hour. (b) [P] means the maximum allowable throughput in tons per hour.</p> <p>Resultant Maximum Emissions Allowable: E = 96.38 pounds per hour</p>	<p>445B.363. This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.</p>	<p>Article 7.2-Industrial Sources:</p> <p>Article 7.2.2-When the process weight rate is less than 30,000 kilograms (60,000 pounds) per hour, the maximum allowable weight discharged per hour will be determined by using the following equation: $E=0.0193P^{0.67}$ (4.10P^{0.67}) E=Maximum rate of emission in kilograms (pounds) per hour P= Process weight rate in kilograms (tons) per hour</p> <p>Article 7.2.3-When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable discharge per hour will be determined by using the following equation: $E=11.78P^{0.11-18.14}$ (55P^{0.11-40}) E=Maximum rate of emission in kilograms (pounds) per hour P= Process weight rate in kilograms (tons) per hour</p> <p>Resultant Maximum Emissions Allowable: E = 96.38 pounds per hour</p>	<p>VI.B.2. Emission Limits</p> <p>a. The discharge of PM (particulate matter) to the atmosphere will not exceed the following:</p> <p>i. The limits specified in B.2.a. of this section and,</p> <p>ii. 0.05 grams per dry standard cubic meter in accordance with 40 CFR Part 60.382(a)(1).</p> <p>b. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed the limits specified in B.2.b. of this section.</p>
Testing and Sampling	<p>§ 60.386 Test methods and procedures. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section,</p>	No Specific Requirements	No Specific Requirements	No Specific Requirements	<p>VI.B.4 Monitoring, Record keeping and Compliance</p> <p>f. Initial Performance Testing</p> <p>i. Conduct and record a Method 5 or Method 17 performance test for particulate matter and PM₁₀ on the exhaust stack of Baghouse (200-DC-</p>

** Company Name - Facility Name ** - Comparison of Applicable Requirements					
System #2 - (Make) Transfer of Primary Crushed Ore S2.001					
	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
	except as provided in ¶ 60.8(b). (b) The owner or operator shall determine compliance with the particulate matter standards ¶ 60.382 as follows: (1) Method 5 or 17 shall be used to determine the particulate matter concentration. (2) Method 9 and the procedures in ¶ 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions.				005) consisting of three valid runs, within 60 days after achieving the maximum production rate at which the South Area Leach Conveyor - 230-CV-02 Transfer to Conveyor - 230-CV-01 will be operated under the alternative operating scenario, but no later than 180 days after initial startup. ii. Conduct and record a Method 9 visible emissions reading on Baghouse (200-DC-005) concurrently with the initial performance test, and in accordance with the provisions established in 40 CFR Part 60.11(b). The minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test.
Monitoring	Not Applicable	No Specific Requirements	No Specific Requirements	No Specific Requirements	No Specific Requirements
Recordkeeping	Not Applicable	No Specific Requirements	No Specific Requirements	No Specific Requirements	No Specific Requirements
Reporting	Not Applicable	No Specific Requirements	No Specific Requirements	No Specific Requirements	No Specific Requirements
Summary of Shielded Requirements	None.	445B.363.3 Sources not otherwise limited. 445B.354.1 Maximum opacity of emissions	445B.363 Sources not otherwise limited. 445B.354 Maximum opacity of emissions	Article 7.2.3 Article 4.1 -Visible Emissions From Stationary Sources	VI.B.5. Shielded Requirements Compliance with conditions B.1. through B.4. of this section shall be deemed to be compliance with the applicable requirements specified below, as of the issuance date of this operating permit. a. NAC Requirements (Version dated 1/97) - 445B.363.3 (Sources not otherwise limited); 445B.354.1 (Maximum opacity of emissions) b. Applicable SIP Requirements (Version dated 1981) - Article 7.2.3 (Industrial Sources); Article 4.1 - (Visible Emissions From Stationary Sources)

System 3
 PF1.016 (Make) 75' Radial Stacker, Model ##, Serial ##

****Company Name - Facility Name ** - Comparison of Applicable Requirements**

System #3 (Make) 75' Radial Stacker - PF1.016

	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Air Pollution Control Technology	<p>¶ 60.40c Applicability and delegation of authority. FR Update 5/08/96 (No NSPS provisions apply)</p>	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Emission Limitations	Not Applicable	<p>445B.363 Sources not otherwise limited. 1. Owners or operators of stationary sources not otherwise included in NAC 445B.360 to 445B.367, inclusive, shall not cause or permit PM₁₀ to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3.</p> <p>3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharged per hour must be determined by using the following equation: $E = 55P^{0.11} - 40$</p> <p>4. For the purposes of subsections 2 and 3: (a) E means the maximum rate of emission in pounds per hour. (b) P means the maximum allowable throughput in tons per hour.</p> <p><i>(Resultant PM₁₀ Maximum Emissions Allowable: 53.46 pounds per hour, based on the maximum allowable throughput rate value of 124 Tons/hr, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>445B.363 Sources not otherwise limited. This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.</p>	<p>Article 7.2 Industrial Sources Article 7.2.1 Sources not otherwise included in these regulations shall not cause, suffer, allow or permit particulate matter to be discharged from any single source into the atmosphere in excess of the allowable emission shown in Table 1. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by the use of the formulas contained in Articles 7.2.2 or 7.2.3.</p> <p>7.2.3 When the process weight rate equals or exceeds 30,000 kilograms (60,000 pounds) per hour the maximum allowable weight discharged per hour will be determined by using the following equation: $E = 11.78P^{0.11} - 18.14 (55P^{0.11} - 40)$ E = Maximum rate of emission in kilograms (pounds) per hour P = Process weight rate in kilograms (tons) per hour.</p> <p><i>(Resultant PM Maximum Emissions Allowable: 53.46 pounds per hour, based on the maximum allowable throughput rate value of 124 Tons/hr, i.e. the proposed permitted limit is more stringent than the emissions allowed by the NAC.)</i></p>	<p>VI.W.2. Emission Limits On and after the date of startup of PF1.016, Department of the Army, Hawthorne Army Depot will not discharge or cause the discharge into the atmosphere from PF1.016, the following pollutants in excess of the following specified limits:</p> <p>a. The discharge of PM (particulate matter) to the atmosphere from PF1.016 will not exceed 0.36 pound per hour, nor more than 1.60 tons per year.</p> <p>b. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.016 will not exceed 0.17 pound per hour, nor more than 0.76 ton per year.</p>

****Company Name - Facility Name ** - Comparison of Applicable Requirements**

System #3 (Make) 75' Radial Stacker - PF1.016

	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
Emission Limitations (Continued)	Not Applicable	445B.354 Maximum opacity of emissions 1. Unless otherwise provided in NAC 445B.354 to 445B.357, inclusive, no owner or operator may cause or permit the discharge into the atmosphere from any stationary source of any regulated air pollutant for a period or periods aggregating more than 3 minutes in any 1 hour which is of an opacity equal to or greater than 20 percent.	445B.354 Maximum opacity of emissions This section of the NAC is not part of the Title V Operating Permit Program regulations utilized by USEPA for program approval.	Article 4 -Visible Emissions From Stationary Sources Article 4.1-Unless otherwise provided herein, no person shall cause, suffer, allow, or permit the discharge into the atmosphere, from any stationary source, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is of an opacity equal to or greater than 20 percent.	VI.W.2. Emission Limits c. The opacity from the PF1.016 will not equal or exceed 20% for a period or periods aggregating more than 3 minutes in any one-hour period.
Operating Parameters	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Work Practice Standard(s)	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Testing and Sampling	Not Applicable	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Monitoring	PART 60 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES SUBPART A General Provisions	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Recordkeeping	See Monitoring Above.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Reporting	See Monitoring above.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements.	No Specific Requirements Streamlined.
Summary of Shielded Requirements	None.	445B.363.3 Sources not otherwise limited. 445B.354.1 Maximum opacity of emissions	445B.363 Sources not otherwise limited. 445B.354 Maximum opacity of emissions	Article 7.2.3 Article 4.1 -Visible Emissions From Stationary Sources	VI.W.5. Shielded Requirements Compliance with conditions W.1. through W.4. of this section shall be deemed to be compliance with the applicable requirements specified below, as of the issuance date of this operating permit. a. NAC Requirements (Version dated 1/97) - 445B.363.3 (Sources not otherwise limited); 445B.354.1

****Company Name - Facility Name ** - Comparison of Applicable Requirements**

System #3 (Make) 75' Radial Stacker - PF1.016

	New Source Performance Standards (NSPS), 40 CFR Part 60 Revised as of July 1, 1996	Nevada Administrative Code (NAC) 445B.001 - 445B.395 Revised as of January, 1997	Nevada Administrative Code (NAC) 445B.001 - 445B.395 (Title V Full Approval - November 30, 2001)	State Implementation Plan (SIP) Articles 1 - Article 14 Revised as of August 1981	Draft Operating Permit Requirements
					(Maximum opacity of emissions) b. Applicable SIP Requirements (Version dated 1981) - Article 7.2.3 (Industrial Sources); Article 4.1 - (Visible Emissions From Stationary Sources)

Appendix 5

FACILITY-WIDE POTENTIAL TO EMIT TABLES

Provide the stationary source's total emissions by completing Table 1 and Table 2 of Appendix 5. (Note: Table 1 must include the insignificant activity emissions identified in Table 2.) [NAC 445B.295.8].

TABLE 1

**FACILITY-WIDE (STATIONARY SOURCE)
POTENTIAL TO EMIT
POUNDS/HOUR AND TONS/YEAR**

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)
Total Particulate Matter (PM)		
Particulates as PM ₁₀		
Sulfur Dioxide		
Carbon Monoxide		
Oxides of Nitrogen		
Volatile Organic Compounds		
Lead		
Hazardous Air Pollutants (Specify Each Pollutant)		
Other Regulated Pollutants (Specify)		

Appendix 6

DETAILED EMISSIONS CALCULATIONS

Please Attach Emission Calculations

Instructions

1. Provide descriptions of all emissions, and provide emission rates, of any pollutants for which the source is major and all emissions of regulated air pollutants from all emission units. [NAC 445B.3363.1(a), NAC 445B.3363.1(b), NAC 445B.295.8]
2. Provide the emission rates of all regulated air pollutants that are subject to an emissions limitation pursuant to an applicable requirement. The emission rate must be described in pounds per hour and tons per year and in such terms as are necessary to establish compliance using the applicable standard reference test method. [NAC 445B.3363.1(d)]
3. Provide all supporting calculations and documentation of all emission factors for the emission rates specified in 1 and 2 above. This information shall be provided for each emission unit. (*Note: A listing of default emission control efficiency values is contained in Attachment 4.*) [NAC 445B.3363.1(f)]
4. Provide any other information required by any applicable requirement for each emission unit. [NAC 445B.3363.1(e)]
5. Provide all emissions of regulated air pollutants (in pounds per hour and tons per year) from **each insignificant activity** (see Section 4 of Appendix 2 to determine if these calculations are required), and calculations and supporting documentation. The emissions and supporting calculations should reflect all insignificant activities listed in Appendix 2. [NAC 445B.295.8]

Appendix 7

EMISSIONS CAP

Please Attach Emission Cap Information

Please Check if not applicable

Instructions

Federally enforceable emissions cap: Please include in Appendix 7 the information required in 1 through 3 below for each federally enforceable emissions cap in Appendix 7. The request for a federally enforceable emissions cap must, at a minimum:

1. State each applicable requirement which the applicant seeks to avoid [NAC 445B.296.2(a)];
2. Demonstrate that any applicable requirements not avoided by the cap will be met [NAC 445B.296.2(b)];
3. Contain proposed conditions, including monitoring and recordkeeping conditions for each proposed federally enforceable emissions cap, of the operating permit which will ensure compliance with any applicable requirement [NAC 445B.296.2(c)].
4. Contain any additional information that the director determines necessary to process the application. [NAC 445B.296.2(d)]

(Note: A common example of an emissions cap is a combined limitation on the yearly (annual) amount of fuel which may be combusted between two boilers.)

Appendix 8

**NARRATIVE
DESCRIPTION**

-

**PROCESS FLOW
DIAGRAM**

-

PLOT PLAN

-

MAP

-

DUST CONTROL PLAN

Instructions

This Appendix must include the following:

1. A narrative description of the entire process. The narrative must include descriptions of all emissions of any regulated air pollutants for which the source is defined as major, and a description of all emissions of regulated air pollutants from all emission units. [NAC 445B.3363.1(a), NAC 445B.3363.1(b)]
2. A detailed process flow diagram of all processes indicating emissions control application points, throughput rate/design heat input rate value, and emission unit identification numbers. [NAC 445B.295.8]
3. A plot plan of the entire source, drawn to scale (include scale). The plot plan shall include the location of all emission units (clearly labeled), emission release points (stack and/or emission point locations, clearly labeled), the fence line, and the property boundary. [NAC 445B.295.8]
4. A USGS 7-1/2" or 15" map or other topographic map (with topographic lines clearly visible) indicating the following [NAC 445B.295.8]:
 - a. Exact location of entire source (also indicate all areas of surface disturbance).
 - b. Property boundary.
 - c. Location of fence or other physical barrier around source (NOTE: This is required.)
 - d. Scale of map.
 - e. UTM's, if other than a USGS 7-1/2" or 15" map is submitted.
 - f. Elevation contours and contour intervals, and contour values, clearly visible and in sufficient detail to determine elevations.
5. For surface area disturbance that will exceed 20 acres, provide a dust control plan, with the exception of Pahrump Valley. In Pahrump Valley, for surface area disturbance of **5 acres or more**, please provide a dust control plan. [NAC 445B.295.8]

Appendix 9

ENVIRONMENTAL EVALUATION AND DISPERSION MODELING FILES

Please Attach Modeling Files and Supporting Information

Instructions

Environmental Evaluation [NAC 445B.3363.3]:

An applicant for a Class I operating permit or a revision to an operating permit must submit, in Appendix 9, an environmental evaluation for:

1. A new stationary source which emits, or has the potential to emit, greater than 25 tons of a regulated air pollutant per year [NAC 445B.310.1];
2. A modification to an existing stationary source that meets the following criteria [NAC 445B.310.2]:
 - a. The existing stationary source has the potential to emit greater than 25 tons of a regulated air pollutant per year; and
 - b. The proposed modification has the potential to emit greater than 10 tons of a regulated air pollutant per year.
3. The environmental evaluation shall contain all information required in NAC 445B.311.
4. The environmental evaluation includes of dispersion models used to determine the location and estimated value of the highest concentration of regulated air pollutants [NAC 445B.311.4].

Modelling Analyses: [NAC 445B.311.1(f); NAC 445B.311.3; NAC 445B.311.4]

The modelling analyses must utilize the latest USEPA approved or equivalent air dispersion models. The analysis must clearly identify the following information at a minimum.

1. Model
 - Name and type used.
 - Default options used.
2. Emissions Data
 - Source parameters (stack/source height, location, dimensions)
 - Building dimensions
 - Background pollutant concentrations
3. Meteorological Data
 - Location of data set utilized
 - Year of data record utilized
 - Quality of data utilized
 - Method for treating missing data
4. Receptors
 - Grid spacing
 - Excluded receptors from within fence line/property boundary
 - Identify simple or complex terrain

The modeling analysis must be provided in digital format and must consist of both the input and output data files. One hard copy of the input and output files must be provided. All meteorological data utilized that has not been provided by the Bureau of Air Pollution Control must also be submitted in digital format. Please include all modeling files in Appendix 9.

Appendix 10

APPLICATION CERTIFICATION

Please complete the certification checklist for all forms and information provided in your application submittal. The responsible official must sign and date the application certification found in Appendix 9. *If the application is signed by a person other than the responsible official, as defined in NAC 445B.156, the application will be returned as incomplete.*

Note: According to NAC 445B.156, **Responsible Official** means:

1. For a corporation:
 - (a) A president;
 - (b) A vice president in charge of a principal business function;
 - (c) A secretary;
 - (d) A treasurer; or
 - (e) An authorized representative of such a person who is responsible for the overall operation of the facility and who is designated in writing by the officer of the corporation and approved in advance by the director.
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
3. For a municipality or a state, federal or other public agency: a ranking elected official or a principal executive officer, including, for a federal agency, a chief executive officer who has responsibility for the overall operations of a principal geographic unit of the agency.
4. For an affected source: the designated representative or his alternate, as defined in 42 U.S. C. § 7651 a (26).

APPLICATION CERTIFICATION

Certification of application content consisting of the following:

(Please check each of the appropriate boxes to indicate the information provided in your application submittal)

General Company Information

General Company Information Form

Emission Unit Application Forms (Appendix 1)

- Industrial Process Application Form(s)
- Combustion Equipment Application Form(s)
- Storage Silos Application Form(s)
- Liquid Storage Tank Application Form(s)
- Surface Area Disturbance Form(s)

Insignificant Emissions Unit Information (Appendix 2)

Insignificant Emissions Unit Information Form(s)

Facility-Wide Applicable Requirements (Appendix 3)

Table 1 - Facility-Wide Applicable Requirements

Streamlining and Shield Allowance (Appendix 4)

Streamlining Demonstration

Facility-Wide Potential To Emit Tables (Appendix 5)

- Table 1 - Facility-Wide Potential To Emit
- Table 2 - Insignificant Activities Potential To Emit

Detailed Emissions Calculations (Appendix 6)

Detailed Emissions Calculations Provided

Emissions Cap Information (Appendix 7)

Emissions Cap Information Provided

Process Narrative, Process Flow Diagram, Plot Plan, Map, Dust Control Plan (Appendix 8)

- Process Narrative Provided
- Flow Diagram Provided
- Plot Plan Provided
- Map Provided
- Dust Control Plan Provided

Dispersion Modeling Files (Appendix 9)

Dispersion Modeling Provided

Application Certification (Appendix 10)

Application Certification

Additional Information Requested by the Director

Any Additional Information Required by the Director

PLEASE NOTE THE FOLLOWING REQUIREMENTS WHICH APPLY TO PERMIT APPLICANTS DURING THE APPLICATION PROCESS:

- A. A permit applicant must submit supplementary facts or corrected information upon discovery [NAC 445B.297.1(b)].
- B. A permit applicant is required to provide any additional information which the Director requests in writing within the time specified in the Director's request [NAC 445B.297.1(c)].
- C. Submission of fraudulent data or other information may result in prosecution for an alleged criminal offense (NRS 445B.470).

CERTIFICATION: I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this application are true, accurate and complete.

Signature of Responsible Official

Print or Type Name **and** Title

Date

ATTACHMENT 1

LIST OF APPROVED INSIGNIFICANT ACTIVITIES

NAC 445B.288.2

Insignificant Activities

The following insignificant activities have been approved by the director in accordance with NAC 445B.288.4:

- Crematory Incinerators processing <175 tons per year (1/24/96)
- Autoclave re-bricking (3/1/96)
- Prill silos <100,000 tons/year (3/1/96)
- Parts cleaners - cold cleaning only (3/1/96)
- Storage tanks, as follows: (3/1/96)

<u>Emission Unit</u>	<u>Tank size (gallons) and</u>	<u>Vapor Pressure (PSIA)</u>
non-HAP VIL*	<40,000	<0.60
non HAP VIL	<200,000	<0.13
HAP VIL	<40,000	<0.15
HAP VIL	<200,000	<0.03
Liquid NaCN	any size	N/A

*VIL - volatile inorganic liquid

- Portable screening plant, processing 100,000 tons of metallic mineral, in less than 6 months, with 4% moisture content (3/5/96)
- Carbon strip/electrowinning circuit, with a total liquid surface area of less than 610 square feet and a solution flow rate less than 400 gallons per minute (6/12/96)
- Mine analytical laboratory fume hoods (6/12/96)
- Mine metallurgical laboratory fume hoods (6/12/96)
- Land farming of not more than 270,000 tons per year of diesel-based hydrocarbon contaminated soil, with a concentration of less than 50,000 ppm Total Petroleum Hydrocarbons. (6/12/96)
- Land farming of not more than 338 tons per year of gasoline-based hydrocarbon contaminated soil, with a concentration of less than 50,000 ppm Total Petroleum Hydrocarbons. (6/12/96)
- Sand washing operations, consisting of material unloading by continuous drop feed on a feed conveyor, double deck screen/wash with two feed conveyors to the materials stockpile, processing the following: (1) less than 765,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and tow conveyor belts at least 7.0% moisture; (2) less than 805,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and tow conveyor belts at least 7.5% moisture; (3) less than 844,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and two conveyor belts at least 8.5% moisture. (6/12/96)
- Lime silo, located at Newmont Gold Company's Rain Project, 127 ton storage capacity, equipped with silo discharge auger which is physically limited to 1.50 tons per hour of discharge of lime (13,140 tons per year). (7/13/98)
- Chemistry laboratory at the HWAD Main Base. (8/24/98)
- Transloading facility for lime, consisting of railcar transfer to screw conveyor, screw conveyor to belt conveyor, belt conveyor to truck, transferring 80 tons per hour, for Continental Lime Inc.'s Dunphy Transloading facility. (1/13/99)
- Newmont Gold Company - Shotcrete Plant described as follows: two (2) cement silo augers, cement metering bin, mix box containing washed pea gravel and sand, and auger to shotcrete transport truck. Shotcrete plant throughput is physically limited by shotcrete discharge auger, at 25.6 tons per hour (19.84 tons per hour gravel/sand and 5.76 tons per hour cement). (4/27/99) (revised 2/20/01)

- SmartAsh 100 disposal unit, specified as follows: 55 gallon steel open head drum, stainless steel lid, plated tubular steel frame, 2 blowers, for burning absorbent materials, paper waste, wood by-products, rags, used filters, waste oil, and other **non-hazardous** waste at a rate of 50 pounds per hour. (5/7/99)
- One evaporator/condenser located at Quebecor Printing Nevada's Fernley facility with a maximum design capacity of 2000 gallons per day. (11/30/99)
- Transloading facility for flyash, consisting of railcar transfer to screw conveyor, screw conveyor to belt conveyor, belt conveyor to truck, transferring 80 tons per hour, for Continental Lime Inc.'s Dunphy Transloading facility. (12/1/99)
- Battery decasing, decanning, washing and waste water treatment operations, located at NAVSEA-HWAD. Combined mercury-zinc, mercury-cadmium and silver-zinc battery process rate not to exceed 1000 batteries per hour and 260,000 batteries per year. Only one battery type may be processed at any given time. Mercury content not to exceed 0.552 pounds per battery. Total uncontrolled mercury emissions from the battery decasing, decanning, washing and wastewater treatment operations not to exceed 0.1 pounds per hour and 26 pounds per year. (5/15/2000)
- Crawford Animal Crematories - Model CB400 and a Model 500P to be located at the Silver Hills Vet Hospital in Carson City. The crematories are to be used for the destruction of animal carcasses only. (12/12/00)
- MCI WorldCom - Six Generac 96A04605-S, 60kW, diesel generators - One each at the following locations: Argenta, Lander County; Carlin, Elko County; Clover Valley, Elko County; Shafter, Elko County; Stonehouse, Humboldt County. (2/20/01)
- Newmont Gold Company's Portable Cement Mixing Plant consisting of - a mix tank for generating cement slurry, and an auger with a maximum throughput of 700 pounds of cement per minute. (2/20/01)
- Barrick Goldstrike Mines, Inc., Pilot Scale Fluidized Bed Roaster w/ Integral Quenching Eductor. Maximum material throughput of 45 pounds per hour with a roaster operating temperature range between 700° and 1200° F. (4/3/01)
- Industrial Metals & Mining, LLC's ore processing operation located in Silver Springs, Nevada consisting of - weigh and assaying of incoming ore, ore roasting, ore sizing, and ore loading to liquid process solution system. (8/10/01)
- Oglebay Norton Industrial Sands, Inc.'s portable sand transloading conveyor. (10/10/01)
- Paramount Nevada Asphalt Company's emulsified asphalt plant. (5/22/02)
- Crawford Animal Crematories, Model C500P natural-gas fired crematory, 75 pounds/hour capacity, located at Great Basin Pet Crematory in Elko. The crematory is to be used for the destruction of animal carcasses only. (10/28/02)
- Bently Nevada, LLC, screen printing operation, manual, processing <50 lb/hr. (12/18/02)
- RMC Nevada, Inc., portable aggregate stacking conveyor which will convey 50 thousand tons of washed sand with approximately 8% moisture into railcars. The conveyor is powered by a 115 h.p. engine. (1/16/03)
- Explosive ordnance training for crime and terrorist scene investigators (post-blast analysis) - An inoperable vehicle (battery and fluids removed) will be destroyed by explosion of 500 pounds of ammonium nitrate per event, not to exceed eight (8) events per 12 month rolling period. Activity will be conducted on a secure range closed to public access on NAS Fallon. (6/25/03)
- Bently Nevada, LLC, potting ovens - electric-heated, components placed in potting cups or trays and potting compound manually poured into the cups or trays. Trays of components are then placed into the potting ovens for curing. (7/24/03)
- Bently Nevada, LLC, transducers-related ovens - used for curing small quantities of epoxy placed on wires, cables, and electrical leads. Average temperature of each oven is 135 to 150 degrees F. (7/24/03)

- Bently Nevada, LLC, plastic mold extruders - feeding of solid plastic beads which are melted and extruded into molds. The barrel of the extruder holds 2 pounds of plastic beads, which are heated to 700 degrees F. Mold temperature is 360 degrees F. (7/24/03)
- Bently Nevada, LLC, CNC lathes and mills, using water-based coolant and oil. (7/24/03)
- Bently Nevada, LLC, conformal coating - conformal coating is the process of spraying a dielectric material onto circuit boards or components. Curing takes places in a conformal coating machine. (7/24/03)
- Bently Nevada, LLC, solder paste application/surface mount/reflow oven - approximately 0.5 gram of solder paste is applied from a 700 gram hand-held tube to each printed circuit board, then a machine wipes the solder paste over the board through a stencil. Components are then surface mounted onto the printed circuit board with a pick and place machine. The surface mounted components are then joined to the printed circuit board inside an electric-powered reflow oven. (7/24/03)
- Bently Nevada, LLC, evaporator - dirty stencils that are used for solder paste application are soaked and cleaned in a bath of water and detergent (Smart Sonic brand). (7/24/03)
- Nevada Cement Company, cooling tower, 300 gallon per minute capacity, with a maximum Total Dissolved Solids concentration of 500 ppm. (7/28/03)
- Newmont Mining Corporation, Lone Tree Mine, Process Cooling Tower (4 cells), NC7043, 3,006 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,680 ppm. (9/4/03)
- Newmont Mining Corporation, Lone Tree Mine, Lube System Cooling Tower (1 cell), NC4001, 540 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,100 ppm. (9/4/03)
- Newmont Mining Corporation, Lone Tree Mine, Oxygen Plant Cooling Tower, (2 cells), NC8012, 1,900 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,480 ppm. (9/4/03)
- Department of the Air Force, Nellis Air Force Base, Nellis Test and Training Range, 17 fuel dispensing operations, designated as TTR1 through TTR12, FDS006 and FDS007, and FDS016 through FDS018. (10/10/03)
- Department of the Air Force, Nellis Air Force Base, Nellis Test and Training Range, 11 fuel loading operations, designated as FLD004 through FLD014. (10/10/03)
- Quebecor World, flexographic plate maker, using no more than 605 gallons per year of VOC product. (11/7/03)
- Quebecor World, five (5) evaporative cooling towers, with a combined water recirculation rate of 6,052 gallons per minute, and a maximum Total Dissolved Solids Concentration of 12,000 ppm. (11/7/03)
- Nevada Wood Preserving, cooling tower, 150 gallons per minute, with a maximum Total Dissolved Solids concentration of 24,000 ppm. (11/20/03)
- Queenstake Resources USA, Inc., three roaster cooling towers, 1,500 gallons per minute each, with a maximum Total Dissolved Solids concentration of 12,000 ppm. (12/9/03)
- Queenstake Resources USA, Inc., oxygen plant cooling tower, 2,699 gallons per minute, with a maximum Total Dissolved Solids concentration of 150 ppm. (12/9/03)
- Newmont Mining Corporation, Twin Creeks Mine, lube system cooling tower, 1,208 gallons per minute, with a maximum Total Dissolved Solids concentration of 2,170 ppm. (12/9/03)
- Newmont Mining Corporation, Twin Creeks Mine, laboratory sample reject bin, processing no more than 2 tons per hour. (12/9/03)
- Orica USA, Inc. prill transloading facility with two silos of 50,000 tons per year of throughput each located in Humboldt County, NV. Only one silo can operate at a time. (3/15/04)

- Queenstake Resources USA, Inc. portable concrete mixing plant located at the Jerritt Canyon Mine with a maximum throughput rate of 200 yd³ of concrete per hour and 60,000 yd³ of concrete per year. (5/28/04)
- Starbucks Coffee Company, Minden Facility, cooling tower, 125 gallons per minute, with a maximum Total Dissolved Solids concentration of 12,000 ppm (5/28/04)
- Global West Industries, LLC feldspar/bentonite silo located in Lovelock, NV with a maximum throughput rate of 10 tons per hour (8/06/04)
- Barrick Goldstrike Mines, Inc., Temporary Shotcrete Plant; maximum shotcrete material throughput rate of 36 yd³ per hour and 13,140 yd³ per year (8/13/04)
- Queenstake Resources USA, Inc. laboratory assay furnaces located at the Jerritt Canyon Mine with a maximum throughput rate of 100 assays of flux and ore per hour. (12/14/04)
- Barrick Goldstrike Inc. Meikle & Autoclave cooling towers, and Autoclave acidulation tanks located at the Goldstrike Mine; TDS for each of the cooling towers is 2,000 ppm and the maximum throughput rate of sulfuric acid (H₂SO₄) for each of the acidulation tanks is 413.0 gallons per hour. (12/28/04)
- Nevada Wood Preserving, Baltimore Aircoil cooling tower, 150 gallons per minute, with a maximum Total Dissolved Solids concentration of 24,000 ppm. (5/18/05)
- Taiyo America, Inc. Argus Spray/Oven Unit, Model No. PC9324B/PC9624 (6/6/05)
- Robinson Nevada Mining Company, a by-product molybdenum plant as an adjunct to its copper processing facility at Ruth, Nevada (7/19/05)
- James Hardie Building Products, Inc. Additive 2 Production Unit - consists of one 8,800 gallon storage tank for non-VOC liquids; two 1,920 gallon mixing tanks with condensers; separation column/evaporator; one 8,800 gallon by-product tank; one 1,920 gallon product storage tank; one 500 gallon acid storage tank; one 2MMBtu/hr natural gas fired boiler. (7/19/05, Modified 10/12/05)
- Chromalloy Nevada. 50 Beltsand booths processing 3 parts per hour each and 30 Unihone Grit Blast Cabinets undergoing 1 hopper change per day each (8/22/05).
- Nevada Department of Corrections – Northern Nevada Correctional Center. Wood Fuel Handling System for the Wood Fired Steam Boiler System. Wood Fuel Handling System consists of a submerged auger, flat bed conveyor, inclined conveyor, and fuel metering bin with a maximum process throughput of 2.375 tons of wood chips per hour.(1/25/06). Cooling Tower for Wood Fired Steam Boiler System. (1/18/06)

ATTACHMENT 2
NAC 445B.288

NAC 445B.288 Operating permits: Exemptions from requirements; insignificant activities. (NRS 445B.210, 445B.300)

1. The following categories of sources are not required to obtain an operating permit:
 - (a) A source that would otherwise be required to obtain an operating permit solely because it is subject to 40 C.F.R. Part 60, Subpart AAA, Standards of Performance for New Residential Wood Heaters.
 - (b) A source that would otherwise be required to obtain an operating permit solely because it is subject to 40 C.F.R. Part 61, Subpart M, National Emission Standard for Asbestos, section 61.145.
 - (c) Agricultural equipment used in the normal operation of a farm, other than agricultural equipment which is classified as, or located at, a source for which a permit is required under Title V of the Act or which is subject to any standard set forth in 40 C.F.R. Part 60 or 61.
2. The following emission units are considered to be insignificant activities unless the emission unit is otherwise subject to another specific applicable requirement, including, without limitation, any requirement or standard set forth in 40 C.F.R. Part 60, 61 or 63:
 - (a) Any equipment or other contrivance used exclusively for the processing of food for human consumption.
 - (b) An incinerator which has a rated burning capacity that is less than 25 pounds per hour.
 - (c) An emission unit that has a maximum allowable throughput or batch load rate of less than 50 pounds per hour, unless the emission unit directly emits, or has the potential to emit, a hazardous air pollutant.
 - (d) A storage container for petroleum liquid, or a storage facility for volatile organic liquid, that has a capacity of less than 40,000 gallons.
 - (e) Except as otherwise provided in paragraphs (f), (g) and (h), air-conditioning equipment or fuel-burning equipment that, individually, has a rating which is:
 - (1) Less than 4,000,000 Btu's per hour; or
 - (2) Equal to or greater than 4,000,000 Btu's per hour if the equipment operates less than 100 hours per calendar year.
 - (f) A portable internal combustion engine that has a rating for output which is:
 - (1) Less than 500 horsepower; or
 - (2) Equal to or greater than 500 horsepower if the engine operates less than 100 hours per calendar year.
 - (g) A stationary internal combustion engine that has a rating for output which is:
 - (1) Less than 250 horsepower; or
 - (2) Equal to or greater than 250 horsepower if the engine operates less than 100 hours per calendar year.
 - (h) An emergency generator. Except as otherwise provided in this paragraph, an emergency generator qualifies as an insignificant activity pursuant to this paragraph only if the emergency generator is an internal combustion engine that is used to generate electrical power to maintain essential operations during unplanned electrical power outages. An emergency generator that is owned or operated by a Class II source and whose potential to emit is calculated on the basis of less than 500 hours of operation does not qualify as an insignificant activity.

3. If an emission unit is considered an insignificant activity and is subject to a limitation on its hours of operation pursuant to subsection 2, the owner or operator of the emission unit shall maintain an operating log of the hours of operation of the emission unit. The operating log must be maintained at the site of the emission unit and made available to the director upon his request. The owner or operator shall retain the operating log for not less than 5 years.
4. The director may, upon written request and a satisfactory demonstration by an applicant, approve an emission unit as an insignificant activity if the emission unit is not otherwise subject to another specific applicable requirement, including, without limitation, any requirement or standard set forth in 40 C.F.R. Part 60, 61 or 63. To be approved as an insignificant activity, an emission unit must meet the following criteria:
 - (a) The operation of the emission unit, not considering controls or limits on production, type of materials processed, combusted or stored, or hours of operation, will not result in:
 - (1) Emissions of a hazardous air pollutant that exceed 1 pound per hour or 1,000 pounds per year, as appropriate;
 - (2) Emissions of regulated air pollutants that exceed 4,000 pounds per year;
 - (3) Emissions of regulated air pollutants that exceed any other limitation on emissions pursuant to any other applicable requirement; or
 - (4) Emissions of regulated air pollutants that adversely impact public health or safety, or exceed any ambient air quality standards; and
 - (b) The emissions from the emission unit are not relied on to avoid any other applicable requirements.

If there are multiple emission units, the director may, after considering the impact of the combined emissions of multiple emission units, determine whether to approve one or more of the specific emission units as an insignificant activity.
5. Except as otherwise provided in NAC 445B.094, emissions from insignificant activities, as determined pursuant to this section, must be included in any determination of whether a stationary source is a major source.
6. A stationary source is not required to obtain an operating permit pursuant to NAC 445B.001 to 445B.3485, inclusive, for any emission unit determined to be an insignificant activity in accordance with this section, as long as the stationary source is not otherwise subject to any other requirement to obtain an operating permit under Title V of the Act. Such an exclusion from the requirements relating to permitting is not an exclusion or exemption from any other requirement set forth in NAC 445B.001 to 445B.3485, inclusive, relating to the operation of the emission unit determined to be an insignificant activity.
7. A stationary source which consists solely of insignificant activities as determined pursuant to this section and which is not otherwise subject to any other requirement to obtain an operating permit under Title V of the Act is not required to obtain an operating permit to operate as a stationary source. Such an exclusion from the requirements relating to permitting is not an exclusion or exemption from any other requirement set forth in NAC 445B.001 to 445B.3485, inclusive, relating to the operation of the stationary source or any insignificant activity that is a part of the stationary source.

[Environmental Comm'n, Air Quality Reg. § 3.1.8, eff. 11-7-75]—(NAC A 10-22-87; 12-8-89; 9-19-90; 11-23-92; 12-13-93, eff. 11-15-94; 3-29-94, eff. 11-15-94; 10-30-95; R117-00, 6-1-2001)

ATTACHMENT 3

LIST OF TRIVIAL ACTIVITIES

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

The following types of activities and emission units may be presumptively omitted from Class I applications. Certain of these listed activities include qualifying statements intended to exclude many similar activities. Trivial activities are emission units without specific applicable requirements under Title V of the Clean Air Act Amendments of 1990 and with extremely small emissions. There are also no applicable State Implementation Plan requirements for these activities. As of June 12, 1998, cooling towers have been removed from this list and must be treated as a permitted item or insignificant activity.

- Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources
- Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the CAA
- Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process
- Non-commercial food preparation
- Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction
- Janitorial services and consumer use of janitorial products
- Internal combustion engines used for landscaping purposes
- Laundry activities, except for dry-cleaning and steam boilers
- Bathroom/toilet vent emissions¹
- Emergency (backup) electrical generators at residential locations
- Tobacco smoking rooms and areas
- Blacksmith forges
- Facility maintenance and upkeep activities (e.g., grounds keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification¹
- Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or degreasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification
- Portable electrical generators that can be moved by hand from one location to another. (NOTE: "Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device)
- Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic
- Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals¹
- Air compressors and pneumatically operated equipment, including hand tools
- Batteries and battery charging stations, except at battery manufacturing plants

¹Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production level thresholds.

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized
- Equipment used to mix and package, soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized
- Drop hammers or hydraulic presses for forging or metalworking
- Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment
- Vents from continuous emissions monitors and other analyzers
- Natural gas pressure regulator vents, excluding venting at oil and gas production facilities
- Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation
- Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOC or HAP
- CO₂ lasers, used only on metals and other materials which do not emit HAP in the process
- Consumer use of paper trimmers/binders
- Drying ovens and autoclaves, electric or steam heated, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam
- Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants
- Laser trimmers using dust collection to prevent fugitive emissions
- Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents²
- Routine calibration and maintenance of laboratory equipment or other analytical instruments
- Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis
- Hydraulic and hydrostatic testing equipment
- Environmental chambers not using hazardous air pollutant (HAP) gases
- Shock chambers
- Humidity chambers
- Solar simulators
- Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted

- Process water filtration systems and demineralizers
- Demineralized water tanks and demineralizer vents
- Boiler water treatment operations, not including cooling towers
- Oxygen scavenging (de-aeration) of water
- Ozone generators

² Many lab fume hoods or vents might qualify for treatment as insignificant or be grouped together for purposes of description.

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Fire suppression systems
- Emergency road flares
- Steam vents and safety relief valves
- Steam leaks
- Steam cleaning operations
- Steam sterilizers
- Oxygen plant, not including fuel burning equipment
- Lime slakers
- Ro-taps (bench scale)
- Riffles
- Ventilated benches (sample preparation area)
- Underground mining activities (including ventilation shafts)
- Aspirating devices for, and venting of, aerosol cans, butane or natural gas cylinders, propane gas cylinders and ether cylinders with a capacity of less than 1 gallon
- Vacuum truck related activities
- Non-commercial experimental and analytical laboratory equipment which are bench scale in nature
- Use of pesticides, fumigants and herbicides
- Equipment using water, soap, detergents, or a suspension of abrasives in water for purposes of cleaning or finishing
- Pump or motor oil reservoirs
- Electric motors
- Soil gas sampling
- Continuous emissions monitoring system calibration gases
- Water treatment or storage or cooling systems for process water (specify any water additives), not including cooling towers
- Chemical storage associated with water and wastewater treatment
- Aerosol can usage
- Plastic pipe and liner welding
- Acetylene, butane and propane torches
- Equipment used exclusively for portable steam cleaning
- Caulking operations which are not part of a production process
- High voltage induced corona
- Production of hot/chilled water for on-site use not related to an industrial process
- Filter draining
- General vehicle maintenance and servicing activities at the source
- Station transformers
- Circuit breakers (non-PCB oil filled)
- Storage cabinets for flammable products
- Fugitive emissions from landfill operations (provided the landfill is not subject to any federal applicable requirement)
- Automotive repair shop activities
- Storm water ponds
- Blast cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Motor vehicle wash areas, etc.
- Open burning (provided all reporting and permitting requirements which apply are followed)
- Firefighting activities and training conducted at the source in preparation for fighting fires
- Open burning activities in accordance with the NAC
- Flares used to indicate danger
- Pressure relief valves
- Natural gas pressure regulator vents, excluding venting at oil and gas production facilities

The original list of hazardous air pollutants as follows:

ATTACHMENT 4

**LIST OF
HAZARDOUS AIR
POLLUTANTS**

The original list of hazardous air pollutants as follows:

CAS Number	Chemical Name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam (See Modification)
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE (See technical note)
334883	Diazomethane
132649	Dibenzofurans (See technical note)
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene(See technical note)

The original list of hazardous air pollutants as follows:

111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)(See technical note)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine(See technical note)
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine(See technical note)
79447	Dimethyl carbamoyl chloride(See technical note)
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine(See technical note)
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene(See technical note)
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid(See technical note)
7664393	Hydrogen fluoride (Hydrofluoric acid)
7783064	Hydrogen sulfide(See Modification)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine

The original list of hazardous air pollutants as follows:

74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether(See technical note)
101144	4,4-Methylene bis(2-chloroaniline)(See technical note)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4'-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus(See technical note)
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate

The original list of hazardous air pollutants as follows:

593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes (See technical note)
108383	m-Xylenes (See technical note)
10642	p-Xylenes (See technical note)
	Antimony Compounds
	Arsenic Compounds (inorganic including arsine)
	Beryllium Compounds
	Cadmium Compounds
	Chromium Compounds
	Cobalt Compounds
	Coke Oven Emissions
	Cyanide Compounds ¹
	Glycol ethers ²
	Lead Compounds
	Manganese Compounds
	Mercury Compounds
	Fine mineral fibers ³ (See technical note)
	Nickel Compounds
	Polycyclic Organic Matter ⁴ (See technical note)
	Radionuclides (including radon) ⁵
	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

¹ X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂

² Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH₂)_n-OH. Polymers are excluded from the glycol category. (See Modification)

³ Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

⁴ Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 ½ C.

⁵ A type of atom which spontaneously undergoes radioactive decay.

Modifications To The 112(b)1 Hazardous Air Pollutants

Authority for modifications:

Section 112 of the Act contains a mandate for U.S. EPA to evaluate and control emissions of hazardous air pollutants. Section 112(b)(1) includes an initial list of hazardous air pollutants that is composed of specific chemical compounds and compound classes to be used to identify source categories for which the U.S. EPA will promulgate emissions standards. The listed categories are subject to emission standards subsequently developed under Section 112. The U.S. EPA must periodically review the list of hazardous air pollutants and, where appropriate, revise this list by rule. In addition, any person may petition U.S. EPA under Section 112(b)(3) to modify the list by adding or deleting one or more substances. A petitioner seeking to delete a substance must demonstrate that there are adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation, or deposition of the substance may not reasonably be anticipated to cause any adverse effects to human health or the environment.

To demonstrate the burden of proof, a petitioner must provide a detailed evaluation of the available data concerning the substance's potential adverse health and environmental effects, and estimate the potential exposures through inhalation or other routes resulting from emissions of the substance.

Modifications

Glycol Ethers - Proposed

On January 12, 1999 (FR64:1780), U.S. EPA proposed to modify the definition of glycol ethers to exclude surfactant alcohol ethoxylates and their derivatives (SAED). This proposal was based on U.S. EPA's finding that emissions, ambient concentrations, bioaccumulation, or deposition of SAED may not reasonably be anticipated to cause adverse human health or environmental effects. U.S. EPA also proposed to make conforming changes in the definition of glycol ethers with respect to the designation of hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The proposal reads as follows:

"The definition of the glycol ethers category of hazardous air pollutants, as established by 42 U.S.C. 7412(b)(1) includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' Where: n= 1, 2, or 3 R= alkyl C7 or less, or phenyl or alkyl substituted phenyl R'= H, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate."

Notices of Review

Date	Citation	Description
06/23/99	64 FR 33453	Notice: Hazardous Air Pollutant list-Methyl Ethyl Ketone(MEK); receipt of a complete petition to delist

Caprolactam

On July 19, 1993, U.S. EPA received a petition from AlliedSignal, Inc., BASF Corporation, and DSM Chemicals North America, Inc. to delete caprolactam (CAS No. 105-60-2) from the hazardous air pollutant list in Section 112(b)(1), 42 U.S.C., Section 7412(b)(1). A Notice of Receipt was published (58FR45081, August 26, 1993) noting that the data filed were adequate to support decision making. After a comprehensive review of the data submitted, the EPA published a proposal to delist caprolactam (60FR48081, September 18, 1995). In order to help address public concern, on March 13, 1995, U.S. EPA executed two detailed agreements with AlliedSignal concerning the Irmo, South Carolina manufacturing facility and another facility located in Chesterfield, Virginia, copies of which are included in the public docket for this rulemaking. AlliedSignal agreed that, if caprolactam was delisted pursuant to the proposal, AlliedSignal would install emissions controls which EPA believed would be equivalent to the controls which would have been required had EPA issued a standard to control these sources under Section 112. The agreed emissions controls are incorporated in federally enforceable operating permits for the affected facilities, and will be in place years

earlier than controls would have otherwise been required. In addition, AlliedSignal has agreed to establish a citizen advisory panel concerning the Irmo facility in order to improve communications with the community and to assure that citizens have an ongoing role in implementation of the agreed emission reductions. The public requesting a public hearing. On November 28, 1995, the EPA published a notice of public hearing and an extension of the comment period (60FR58589). After considering all public comments, the EPA published a final rule delisting caprolactam (61FR30816, June 18, 1996).

All information associated with this rule making is located in Docket Number A-94-33 at the Central Docket Section (A-130), Environmental Protection Agency, 401 M St. SW., Washington, D.C. 20460. phone 202-260-7548, fax 202-260-4400, email a-and-r-docket@epamail.epa.gov. The docket includes complete index to all papers filed in this docket, a copy of the original petition, comments submitted, and additional materials supporting the rule. A reasonable fee may be charged for copying. The docket may be inspected in person between 8:00 a.m. and 4:30 p.m. on weekdays at EPA's Central Docket Section, West Tower Lobby, Gallery 1, Waterside Mall, 401 M St., SW, Washington, D.C. 20460.

Hydrogen Sulfide

A clerical error led to the inadvertent addition of hydrogen sulfide to the Section 112(b) list of Hazardous Air Pollutants. However, a Joint Resolution to remove hydrogen sulfide from the Section 112(b)(1) list was passed by the Senate on August 1, 1991 (Congressional Record page S11799), and the House of Representatives on November 25, 1991 (Congressional Record pages H11217-H11219). The Joint Resolution was approved by the President on December 4, 1991. Hydrogen Sulfide is included in Section 112(r) and is subject to the accidental release provisions. A study (see below) was required under Section 112(n)(5).

Hydrogen Sulfide Air Emissions Associated with the Extraction of Oil and Natural Gas,
EPA-453/R-93-045,
NTIS (publication # is PB94-131224, \$36.50 hard copy, \$17.50 microfiche).

National Technical Information Services (NTIS)
5285 Port Royal Road
Springfield, VA 22161
703-487-4650 800-426-4791
703-487-4807 8:30-5:30 EST M-F

ATTACHMENT 5

LIST OF DEFAULT CONTROL EFFICIENCY RATINGS

Nevada Bureau of Air Pollution Control
Emission Control Technology - Control Efficiency Ratings

Emission Control Technology	Control Efficiency Rating
Water Sprays	75%
Fogging Water Sprays	85%
Fogging Water Sprays with Surfactant	90%
Pneumatic Fogging Water Sprays	95%
Cyclones	*80%
High-Efficiency Cyclones	*96%
Multi Clones	*95%
Wet Scrubber	*85%
Venturi Scrubber	*95%
High-Efficiency Wet Scrubber	*98%
Electrostatic Precipitator	*Manufacturers Guarantee
Enclosure	50%
Filter Vent (cartridge or filter sock)	*90%
Baghouse/Dust Collector	*Manufacturers Guarantee/0.02 grains/dscf

Note: - The guaranteed emissions outlet (outlet grain loading) information from the pollution control device manufacturer should be utilized to derive appropriate emissions limitations rather than the percent reduction ratings provided above. The percent reduction rating provided by the pollution control device manufacturer is based on the difference between the amount of pollutant entering the control versus the amount of pollutant exiting the control. If the percent reduction rating provided above is applied to emission factors (such as those provided in AP-42) that are different from those used by the pollution control device manufacturer in the design of the control, excessively low, and in many cases un-achievable emissions levels may be calculated.