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BUTCH TONGATE
DEPUTY SECRETARY

NEW SOURCE REVIEW PERMIT
Issued under 20.2.72 NMAC

Certified Mail No: 7011 3500 0003 5408 7628
Return Receipt Requested

NSR Permit No:	0365-M3
Facility Name:	Copper Flat Mine
Permittee Name:	New Mexico Copper Corporation
Mailing Address:	2424 Louisiana Blvd., NE, Suite 301 Albuquerque, New Mexico 87110
TEMPO/IDEA ID No:	1535-PRN201300001
AIRS No:	35-051-0013
Permitting Action:	Significant Permit Revision
Source Classification:	PSD Minor & Title V Minor
Facility Location:	32°57'59" N and 107°31'24" W
County:	Sierra
Air Quality Bureau Contact	Sam Speaker
Main AQB Phone No.	(505) 476-4300

Rita Bates
for **Richard L. Goodyear, PE**
Bureau Chief
Air Quality Bureau

6/25/13
Date

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Richard L. Goodyear, PE
Bureau Chief
Air Quality Bureau

Date

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. Permit 0365-M3 is a new permit for a new facility located at the old mine site. Permit 0365-M2 was closed on October 16, 2001. There are no existing structures or activities located at this site.

A101 Permit Duration (expiration)

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

A. The function of the facility is to remove overburden material, mine copper ore, process the ore through a crushing and concentrator flotation circuit, transport the concentrate off site, and dispose of the mine tailing onsite.

B. This facility is located approximately 4.2 miles northeast of Hillsboro, New Mexico in Sierra County.

C. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding exempt sources or activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	54.0
Carbon Monoxide (CO)	214.0
Sulfur Dioxide (SO_2)	6.4
Total Suspended Particulates (TSP)	657
Particulate Matter less than 10 microns (PM_{10})	222
Particulate Matter less than 2.5 microns ($PM_{2.5}$)	48

Table 102.B: Total Potential HAPS that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)
Total HAPs**	None Listed

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.1 NMAC General Provisions	X	Facility
20.2.3 NMAC Ambient Air Quality Standards	X	Facility
20.2.7 NMAC Excess Emissions	X	Facility
20.2.61 NMAC Smoke and Visible Emissions	X	EG1* and EG2*
20.2.72 NMAC Construction Permit	X	Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Facility
20.2.75 NMAC Construction Permit Fees	X	Facility
20.2.77 NMAC New Source Performance	X	S7, S8, S9, S10, S12, S13, S14, S16, 17, S19, S19, S20, EG1*, and EG2*
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	EG1* and EG2*

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 50 National Ambient Air Quality Standards	X	Facility
40 CFR 60, Subpart A, General Provisions	X	EG1*, EG2* and LL Sources
40 CFR 60, Subpart LL	X	LL Sources (S7, S8, S9, S10, S12, S13, S14, S16, 17, S19, S19, and S20)
40 CFR 60, Subpart IIII	X	EG1* and EG2*
40 CFR 63, Subpart A, General Provisions	X	EG1* and EG2*
40 CFR 63, Subpart ZZZZ	X	EG1* and EG2*

- Note: EG1 and EG2 are exempt equipment and not otherwise regulated in this permitting action.

A104 Facility: Regulated Sources

A. Table 104 lists the emission units authorized for this facility. Emission units identified as exempt activities (as defined in 20.2.72.202 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table 104: Regulated Sources List

Unit No.	Source Description	Make Model	Serial No.	Manufacture Date	Capacity	Other
S1	Open Pit - Drilling	NA	NA	NA	29,000 Hole/Year	Uncontrolled
S2	Open Pit - Blasting	NA	NA	NA	290 Blasts/Yr	Uncontrolled
S3	Prill Storage Silo	NA	NA	NA	3650 Tons/Yr	Uncontrolled
S4	Open Pit - Haul Truck Loading	NA	NA	NA	15,042,000 TPY	Uncontrolled
S5	Open Pit - Bulldozing	NA	NA	NA	8760 Hour/Yr	Uncontrolled
S6	Raw Ore Surge Bin	TBD	TBD	TBD	9,125,000 TPY	Water Sprays
S7	Surge Bin Apron Feeder	TBD	TBD	TBD	9,125,000 TPY	Primary Crusher Vault – Dust Collector
S8	Primary Crusher	TBD	TBD	TBD	9,125,000 TPY	
S9	Primary Crusher Apron Conveyor	TBD	TBD	TBD	9,125,000 TPY	
S10	Stacker Conveyor - Course Ore Pile	TBD	TBD	TBD	9,125,000 TPY	Water Sprays
S11	Course Ore Pile - Bulldozer	TBD	TBD	TBD	9,125,000 TPY	Water
S12	Course Ore Pile Reclaimer	TBD	TBD	TBD	9,125,000 TPY	Reclaimer Vault – Dust Collector
S13	Reclaimer Conveyor	TBD	TBD	TBD	9,125,000 TPY	

Unit No.	Source Description	Make Model	Serial No.	Manufacture Date	Capacity	Other
S14	Conveyor Drop into Wet Mill	TBD	TBD	TBD	9,125,000 TPY	Water Sprays & Enclosure
S15	Lime Silo	TBD	TBD	TBD	10,950 TPY	Lime Silo – Dust Collector
S16	Molybdenum Conveyor	TBD	TBD	TBD	930 TPY	Molybdenum Mill Area – Dust Collector
S17	Molybdenum Bagger	TBD	TBD	TBD	930 TPY	
S19	Truck Loading - Molybdenum	NA	NA	NA	930 TPY	
S18	Copper Concentrate Conveyor	TBD	TBD	TBD	100,700 TPY	Full Enclosure
S20	Truck Loading - Copper Concentrate	NA	NA	NA	100,700 TPY	¾ Enclosure
S21	Truck Unloading - Low Grade Ore	NA	NA	NA	267,000 TPY	Uncontrolled
S22	Bulldozer - Low Grade Ore Stockpile	NA	NA	NA	5840 Hour/Yr	Uncontrolled
S23	Truck Unloading - Waste Dump Stockpile	NA	NA	NA	5,650,000 TPY	Uncontrolled
S24	Bulldozer - Waste Dump Stockpile	NA	NA	NA	8760 Hour/Yr	Uncontrolled
S25	Bulldozer - Tailings Dam Area	NA	NA	NA	8760 Hour/Yr	Uncontrolled
S29	Truck Traffic - Mine Haul Trucks/Light Vehicles	NA	NA	NA	610,649 Mile/Yr	Haul Road Watering
S30	Truck Traffic - Product/Chemical Delivery Trucks	NA	NA	NA	22,073 Mile/Yr	Haul Road Watering
S31	Mine Road Grader	NA	NA	NA	5000 Hour/Yr	Uncontrolled
S32	Wind Erosion - Course Ore Pile	NA	NA	NA	1.2 Acres	Uncontrolled
S33	Wind Erosion - Open Pit Area	NA	NA	NA	169 Acres	Uncontrolled
S34	Wind Erosion - Low Grade Ore Stockpile Area	NA	NA	NA	68 Acres	Uncontrolled

Unit No.	Source Description	Make Model	Serial No.	Manufacture Date	Capacity	Other
S35	Wind Erosion - Waste Dump Stockpile Area	NA	NA	NA	210 Acres	Uncontrolled
S36	Wind Erosion - Tailings Area	NA	NA	NA	547 Acres	Uncontrolled

1. All TBD (to be determined) units and like-kind engine replacements must be evaluated for applicability to NSPS and NESHAP requirements.

A105 Facility: Control Equipment

A. Table 105 lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

Table 105: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s)[1]
1	Water/Chemical Suppressant Sprays	PM	S6
2	Primary Crusher Vault Particulate Dust Collector	PM	S7, S8, S9
3	Water/Chemical Suppressant Sprays	PM	S10
4	Water/Chemical Moisture Content	PM	S11
5	Coruse Ore Reclaimer Particulate Dust Collector	PM	S12 and S13
6	Passive Full Enclosure & Water Sprays	PM	S14
7	Lime Silo Particulate Dust Collector	PM	S15
8	Molybdenum Mill Area Particulate Dust Collector	PM	S16, S17, S19
9	Copper Concentrate Storage Pile Passive Full Enclosure	PM	S18
10	Copper Concentrate Truck Loading Passive 3/4 Enclosure	PM	S20
12	Haul Truck/Light Vehicle Haul Road Dust Control	PM	S29
13	Product/Chemical Delivery Access Road Dust Control	PM	S30

1. Control for unit number refers to a unit number from the Regulated Equipment List

A106 Facility: Allowable Emissions

A. The following Section lists the emission units and their allowable emission limits. (40 CFR 50, 40 CFR 60, Subparts A and XYZ, 20.2.72.210.A and B.1 NMAC).

Table 106.A: Allowable Emissions

Unit No.	NO_x[1] pph	NO_x[1] tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	TSP pph	TSP tpy	PM_{10} pph	PM_{10} tpy	$PM_{2.5}$ pph	$PM_{2.5}$ tpy
S1	-	-	-	-	-	-	-	-	5.4	19	2.8	9.9	<	2.0
S2	374	54	1474	214	-	-	44	6.4	54	2.3	28	1.2	1.6	<
S3	-	-	-	-	-	-	-	-	<	<	<	<	<	<
S4	-	-	-	-	-	-	-	-	10	44	4.7	21	<	3.1
S5	-	-	-	-	-	-	-	-	21	41	4.5	8.9	2.2	4.3
S6	-	-	-	-	-	-	-	-	1.5	6.7	0.72	3.2	<	0.48
Primary Crusher Vault Dust Collector														
S7	-	-	-	-	-	-	-	-	1.0	4.5	1.0	4.5	1.0	4.5
S8	-	-	-	-	-	-	-	-						
S9	-	-	-	-	-	-	-	-						
S10	-	-	-	-	-	-	-	-	1.5	6.7	0.7	3.2	<	0.48
S11	-	-	-	-	-	-	-	-	15	21	3.1	4.5	1.50	2.2
Reclaimer Vault Dust Collector														
S12	-	-	-	-	-	-	-	-	1.0	4.5	1.0	4.5	1.0	4.5
S13	-	-	-	-	-	-	-	-						
S14	-	-	-	-	-	-	-	-	0.23	1.0	0.11	0.47	<	0.072
Lime Silo Loading Dust Collector														
S15	-	-	-	-	-	-	-	-	0.043	0.0094	0.043	0.0094	<	0.0094
Molybdenum Mill Dust Collector														
S16	-	-	-	-	-	-	-	-	1.0	4.5	1.0	4.5	1.0	4.5
S17	-	-	-	-	-	-	-	-						
S19	-	-	-	-	-	-	-	-						
S18	-	-	-	-	-	-	-	-	<	<	<	<	<	<
S20	-	-	-	-	-	-	-	-	<	<	<	<	<	<
S21	-	-	-	-	-	-	-	-	<	<	<	<	<	<
S22	-	-	-	-	-	-	-	-	21	20	4.5	4.3	2.2	2.1
S23	-	-	-	-	-	-	-	-	3.8	17	1.8	7.8	<	1.2
S24	-	-	-	-	-	-	-	-	21	30	4.5	6.5	2.2	3.2
S25	-	-	-	-	-	-	-	-	2.9	4.2	0.5	0.8	0.3	0.4
S29	-	-	-	-	-	-	-	-	87	319	25	91	2.5	9.1
S30	-	-	-	-	-	-	-	-	3.7	13	1.0	3.5	<	<
S31	-	-	-	-	-	-	-	-	11	28	3.8	9.6	<	<
S32	-	-	-	-	-	-	-	-	<	1.1	<	<	<	<
S33	-	-	-	-	-	-	-	-	3.2	14	1.6	7.0	<	1.0
S34	-	-	-	-	-	-	-	-	1.3	5.6	<	2.8	<	<
S35	-	-	-	-	-	-	-	-	3.9	17	2.0	8.6	<	1.3
S36	-	-	-	-	-	-	-	-	3.3	14	1.6	7.2	<	1.1

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2

2 "-" indicates the application represented emissions of this pollutant are not expected.

3 "<" indicates the application represented uncontrolled emissions are less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls.

4 "*" indicates hourly emission limits are not appropriate for this operating situation.

A107 Facility: Allowable Startup, Shutdown, Maintenance, and Malfunctions(SSM&M)

A. Allowable SSM&M emission limits are not imposed at this time. The permittee shall maintain records in accordance with Condition B109.C.

A108 Facility: Allowable Operations

A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting are required to demonstrate compliance with continuous hours of operation.

A109 Facility: Reporting Schedules – Not Applicable

A110 Facility: Fuel Sulfur Requirements – N/A

A111 Facility: 20.2.61 NMAC N/A

A112 Facility: Haul Roads

A. Truck Traffic

Requirement: The number of haul road round trips shall not exceed: (1) 91,250 Trips/yr for the material delivered to the Crusher (2) 2,670 Trips/yr for the material delivered to the low grade ore stockpile, (3) 56,500 Trips/yr for the material delivered to open pit waste stockpile, and (4) 4,558 trucks per year of copper concentrate products, molybdenum concentrate products, and chemical delivery trucks. Each day for the first 365-days, compliance shall be determined by calculating the cumulative total truck traffic each day for each group listed above. After the first 365-days, compliance shall be determined by calculating the daily rolling 365-day total for each group above.
Monitoring: The permittee shall continually monitor the total number of haul road round trips per day for each group.
Recordkeeping: The permittee shall keep daily records of: the total number of haul road trips per day, for the first 365-days - the cumulative daily total, and after the first 365-days - the daily rolling 365-day total.
Reporting: The permittee shall report in accordance with Section B110.

B. Plant Access Haul Road Control – Day and Night (Unit S30)

Requirement: Compliance with the haul road emissions limits in table A106.A shall be demonstrated by the application of base course and watering to control particulate emissions from haul roads. The permittee shall reapply base course and/or water to the haul roads immediately upon observing visible emissions higher than the headlights or taillights of a typical highway semi-truck. This control measure shall be used on roads as far as the nearest public road.

Monitoring: When there is material being transported on the roads, the permittee shall continually monitor the dust generated on the Plant Access Haul Road to determine if water and/or base course is needed.

For each hour of night operation in which the haul roads were not watered, the permittee shall monitor the road surfaces to see if dust is rising higher than the headlights or taillights of a typical highway semi-truck.

Recordkeeping: Records summarizing the observations conducted on dust from haul road traffic shall be made at least once in the morning during the first hour of morning truck traffic and at least once in the afternoon during the first hour of afternoon (12:00 PM) truck traffic.

For each summary record, the permittee shall record the name of the person making the record, date, time of the record, and any actions taken as a result of the observation. If water or base course is applied to the roads, based on the above monitoring requirements, then the record shall also include:

(1) date, time, quantity, and location(s) of the water application, or equivalent control measures.

(2) quantity, and location(s) of the base course application.

(3) For night operations, the permittee shall make a record of each hourly dust monitoring activity to see if additional watering is necessary. At a minimum the record shall include the date, the time of the observation, the roads and surfaces observed, the results of the observation, and the name of the person making the observation.

If observations are not made for reasons such as weather conditions or no truck traffic, the permittee shall record the time period and reason why the observation was not made.

Reporting: The permittee shall report in accordance with Section B110.

C. Mine Haul Road Control - Day and Night

Requirement:

1. All haul roads and truck traffic areas other than the Plant Access Haul road (Unit 30) used to deliver mined material to the crusher, low grade ore stockpile, and open pit waste stockpile (including Unit S29) shall be watered no less than once every two hours. The water application ratio shall be at least 0.27 gal/m^2 (1.01 L/m^2). This control measure shall be used on roads as far as the nearest public road.

The frequency of watering once every 2-hrs can be relaxed if there is no traffic on the roads or during period where weather conditions result in no visible emissions from vehicle traffic. Night time traffic shall be watered at the same frequency that accrued during the previous calendar day except when the application of water would result in unsafe roads due to mud or ice. 2. As an alternative to watering every two hours, the permittee may apply and maintain surfactants on the haul roads or portions of the haul roads and water the roads at least once in the morning between the hours of 9:30 and 11:00 AM and once in the afternoon between the hours of 2:00 PM and 4:00 PM. Water shall be reapplied if visible emissions are observed to be higher than the headlights or taillights of a typical factory available pickup truck **(including 4x4 trucks)** or leaving the haul road. The surfactant shall be reapplied as recommended by the manufacturer, but at no less than once every 90-days and maintained in accordance with manufactures recommended procedures.
Monitoring: 1. The permittee shall monitor the frequency, quantity, and location(s) of the water application, or equivalent control measures. 2. The permittee shall monitor the haul roads (or portions of haul roads) where surfactant is applied daily to insure the surfactant is maintained as specified by the manufacture.
Recordkeeping: 1. The permittee shall keep daily records of the frequency, quantity, and location(s) of the water application, or equivalent control measures. 2. The permittee shall keep track of the daily surfactant monitoring required above and any surfactant maintenance. 3. The permittee shall keep a map on file that clearly shows where surfactants are being used. 4. The permittee shall keep a copy of the surfactant manufacturer's recommended application and maintenance procedures for Department review.
Reporting: The permittee shall report in accordance with Section B110.

A113 Facility: Initial Location Requirements

A. This is not a portable facility

B. Colocation is not authorized by this permit.

A114 Facility: Relocation Requirements

A. This facility may not be relocated.

A115 Alternative Operating Scenario

A. As allowed in Part B of this permit. The permittee shall operate this facility in such manner that all applicable requirements and the requirements of 20.2.72 NMAC are met regardless of what scenario the facility is operating under.

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

A300 Construction Industry - Aggregate

A400 Construction Industry – Asphalt

A500 Construction Industry – Concrete

A600 Power Generation Industry

A700 Solid Waste Disposal (Landfills) Industry– Not Required

A800 Miscellaneous Operations Introduction – Not Required

A. Facility Throughput

Requirement: The permittee shall comply with the following throughput limits based on a daily rolling 365-day total. For the first 365-days of operations the limit below shall be interpreted as a cumulative total calculated once each calendar day.

(1) Crusher/SAG mill production rate 9,125,000 tons/yr.

(2) Copper Concentrate production rate of 100,700 tons/yr.

(3) Molybdenum concentration production rate of 930 tons/yr

(4) ANFO use shall not exceed 6,380 tons/yr

(5) Lime delivery rate of 10,950 tons/yr

Monitoring:

1) The permittee shall continually monitor the amount of material processed for the following processes. This shall be done by use of a weigh belt and a non-resettable electronic data logger. The data logger shall record a reading no less than once every

6-minutes. a) Ore that passes that is delivered to the Crusher/SAG mill b) Copper concentrate produced c) Molybdenum concentrate produced. 2) The permittee shall continuously monitor the amount of ANFO used each calendar day. 3) The permittee shall continuously monitor the amount of lime delivered to the facility each day.
Recordkeeping: The permittee shall keep records of: the daily monitoring values required above the cumulative total - for the first 365 days, the daily rolling 365-day total - after the first 365-days, and any required calculations.
Reporting: The permittee shall report in accordance with Section B110.

A801 <u>Lime Silo</u>

A. Lime Silo – Process Rate (Unit S15)

Requirement: Lime Silo (Unit: S130) loading shall not exceed 10,950 tons per year based on a monthly rolling 12-month total.
Monitoring: The permittee shall continuously monitor the date, time, and amount of material loaded into the lime silo.
Recordkeeping: The permittee shall maintain an operating log recording date, time, and total Lime loaded into the silo (Unit S15). During the first 12-months of monitoring, each month the permittee shall record the monthly cumulative total. After the first 12-months of monitoring, the monthly rolling 12-month total.
Reporting: The permittee shall report in accordance with Section B110.

B. Lime Silo – Fabric Filter (Unit S15)

Requirement: The lime silo (Unit S15) shall be equipped with a baghouse/cartridge filter so that all displaced dust from the silo is vented to the baghouse/cartridge filter. The baghouse/cartridge filter shall be equipped with a device to continually monitor and measure the pressure drop across the filter. The permittee shall establish a normal operating range within the first 90-days of operation. The permittee shall keep this information on file for the life of the unit.
Monitoring: The permittee shall monitor the differential pressure across the filter each time lime is added to the silo. The differential pressure reading shall be taken while material is actively being loaded to the silo.
Recordkeeping: The differential pressure measured by the gauge on the fabric filter shall be recorded once each time material is added to the silo. When Material is added to the silo, the permittee shall also record the date, start time, and end time of the baghouse/cartridge filter.

Reporting: The permittee shall report in accordance with Section B110.

C. Lime Silos – Alarm (Unit S15)

Requirement: The owner or operator shall equip silos with audible alarms, which activate when the silo is between 90 and 95 percent full.
Monitoring: The fill alarm shall be tested no less than once per calendar year to insure proper operation.
Recordkeeping: The permittee shall maintain a record of the annual alarm test and any maintenance that resulted from the test.
Reporting: The permittee shall report in accordance with Section B110.

A802 Dust Collectors

A. Dust Collectors (Units S7, S8, and S9; Units S12 and S13; and Units S16, S17, and S19)

Requirement: The following units shall be equipped with a baghouse/cartridge filter so that all displaced dust from the silo is vented to the baghouse/cartridge filter. The baghouse/cartridge filter shall be equipped with a device to continually monitor and measure the pressure drop across the filter. A. S7, S8, S9 - Primary Crusher Vault – Dust Collector. B. S12 and S13 - Reclaimer Vault – Dust Collector. C. 16, 17, 19 Molybdenum Mill Area - Dust Collector The permittee shall establish a normal operating range within the first 90-days of operation. The permittee shall keep this information on file for the life of the unit.
Monitoring: The permittee shall continually monitor the differential pressure across the filter by use of electronic monitoring system and a data logger. The data logger shall take reading at least once every 6-minutes..
Recordkeeping: The differential pressure shall be recorded by a data logger. When the facility is in operation, the permittee shall maintain a daily operating log recording all operating times of the baghouse/cartridge filter.
Reporting: The permittee shall report in accordance with Section B110.

A803 Moisture Content of Tailing Embankment Material

A. No less than 10%

Requirement: The moisture content of the tailings being added to the tailing embankment shall be 10% or more.
Monitoring: Once each calendar week the concentrator is operated, the permittee shall measure the moisture content of the tailing embankment material.

If the value reads more than 10% for more than 52 consecutive weeks, the monitoring frequency can be reduced to once in July and upon request by the Department. If at any time the moisture content fall below 10%, then weekly monitoring shall resume until such time that 52 consecutive weekly readings are 10% or more are recorded.
Recordkeeping: The permittee shall keep a log of the sample date, sample time, and moisture content test results.
Reporting: The permittee shall report in accordance with Section B110.

A804 Moisture Content of Copper Concentrate

A. No less than 8%

Requirement: The moisture content of the copper concentrate shall be 8% or more.
Monitoring: Once each week the permittee shall measure the moisture content of the Copper concentrate material storage pile as it is discharged from the mill. If the value reads more than 8% for more than 52 consecutive weeks, the monitoring frequency can be reduced to once in July and upon request by the Department. If at any time the moisture content fall below 8%, then weekly monitoring shall resume until such time that 52 consecutive weekly readings are 8% or more are recorded.
Recordkeeping: The permittee shall keep a log of the sample date, sample time, and moisture content test results.
Reporting: The permittee shall report in accordance with Section B110.

A805 Raw Ore Surge Bin (Unit S6)

A. Daily Inspection of Water Sprays(Unit S6)

Requirement: The permittee shall demonstrate ongoing compliance with the requested allowable emissions limits established in this permit by installing, operating, and maintaining water sprays to control dust emissions.
Monitoring: Within two hours of startup of each calendar day, the permittee shall inspect the water sprays to ensure they are controlling fugitive dust emissions. This inspection shall include, but is not limited to; spray bars are pointing in the right places, are not blocked or plugged, and are atomizing the water properly.
Recordkeeping: A daily record shall be made of the inspection and any maintenance activity that resulted from the inspection. At a minimum, the record shall include the date, time, name of individual conducting the test, a description of any malfunction, and any corrective actions taken. The record shall be attached to a description of what shall be inspected, to insure that the inspector understands his or her responsibilities.
Reporting: The permittee shall report in accordance with Section B110.

A806 Stacker Conveyor - Course Ore Pile (Unit S10)

A. Daily Inspection of Water Sprays (Unit S10)

Requirement: The permittee shall demonstrate ongoing compliance with the requested allowable emissions limits established in this permit by installing, operating, and maintaining water sprays to control dust emissions.
Monitoring: Within two hours of startup of each calendar day, the permittee shall inspect the water sprays to ensure they are controlling fugitive dust emissions. This inspection shall include, but is not limited to; spray bars are pointing in the right places, are not blocked or plugged, and are atomizing the water properly.
Recordkeeping: A daily record shall be made of the inspection and any maintenance activity that resulted from the inspection. At a minimum, the record shall include the date, time, name of individual conducting the test, a description of any malfunction, and any corrective actions taken. The record shall be attached to a description of what shall be inspected, to insure that the inspector understands his or her responsibilities.
Reporting: The permittee shall report in accordance with Section B110.

A807 Bulldozer Activity (Unit S5, S11, S22, S24 and S25)

A. Limit to annual hours of operation for Bulldozer Activities.

Requirement: The total operating hours for bulldozers shall not exceed 40,880 hours per year. For the first 12-months this limit shall be based on a cumulative total. After the first 12-months this limit shall be based on a weekly rolling 52-week total.
Monitoring: The permittee shall continually monitor the total meter hours of all bulldozers operating.
Recordkeeping: The permittee shall keep a daily log showing the date, and non-resettable runtime meter readings for all operating bulldozers each calendar day that the units operated. Each calendar week the permittee shall calculate the weekly and weekly rolling 52-week total to show compliance or noncompliance with this requirement.
Reporting: The permittee shall report in accordance with Section B110.

A808 Conveyor Drop into Wet SAG Mill (Unit S14)

A. The permittee shall design and operate the SAG Mill as a wet process. This includes adding water to the material on Unit 14 before or at the material drop point.

B. The Conveyor belt (Unit S14) transfer to the wet mill shall be done within a building or structure. The building or structure shall be a full enclosure.

A809 Unit S18 shall be within a Full Enclosure. Copper Concentrate Conveyor

A. The Copper Concentrate Conveyor belt drop (Unit S18) shall be located within a building or structure. The building or structure shall be a full enclosure.

A810 Unit S20 shall be enclosed within a structure that has at least three wall (¾ enclose).

A. The Truck Loading - Copper Concentrate Conveyor belt drop (Unit S20) shall be located within a building or structure. The building or structure shall be a 3/4 enclosure.

A811 Tailing Storage Area Scraper Activity

A. Tailings Storage Area Scraper Activity

Requirement: The scraper activity in the tailings storage area shall be completed within 20-months of start of that activity (Unit 28 in the application).
Monitoring: None
Recordkeeping: The permittee shall keep a record of the date that Scraper activity started and a date of completion of scraper activity.
Reporting: The permittee shall report in accordance with Section B110.

A812 Fugitive Dust Plan

A. Fugitive Dust Control Plan (FDCP)

Requirement: The permittee shall develop a Fugitive Dust Control Plan (FDCP) for minimizing emissions from areas such as aggregate feeders, bins, bin scales, storage pile, overburden removal, disturbed earth, buildings, truck loading/unloading, or active pits. The FDCP shall include, but is not limited to: Sites of overburden removal and active pit areas shall be watered, dependent on existing wind speeds and soil moisture content, as necessary to minimize dust emissions. Or, stock piles shall be maintained with standard industry practices and procedures to minimize fugitive emissions to the atmosphere.
Monitoring: Once each calendar month, the permittee shall inspect each area to insure that fugitive dust is being minimized and determine if the FDCP plan needs updated.
Recordkeeping: Monthly, the permittee shall make a record of each monthly inspection and revise the plan to address past shortcomings as well as future activities. If no changes are needed, then the permittee shall make a record that the plan needs no changes. The permittee shall make a record of any action taken to minimize emissions as a result of the FDCP or monthly inspections.
Reporting: The permittee shall report in accordance with Section B110.

A813 40 CFR 60 Subpart LL

A. 40 CFR 60 Subpart LL (S7, S9, S9, S10, S12, S13, S14, S16, 17, S19, S19, and S20)

Requirement: This facility shall comply with the applicable requirements of 40 CFR 60 Subpart A and LL - Standards of Performance for Metallic Mineral Processing Plants.
Monitoring: This facility shall monitor in accordance with 40 CFR 60 Subpart LL.
Recordkeeping: This facility shall keep records in accordance with 40 CFR 60 Subpart LL.
Reporting: This facility shall report in accordance with 40 CFR 60 Subpart LL.

A814 Blasting (Unit S2)

A. Blasting Limitations (Unit S2)

Requirement: To demonstrate compliance with the emission limits, blasting shall only be done once per day and during Daylight Hours Only.
Monitoring: None
Recordkeeping: The permittee shall keep a log of the date and time of each blasting event.
Reporting: This facility shall report in accordance with 40 CFR 60 Subpart LL.

PART B GENERAL CONDITIONS

B100 Introduction

A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

B101 Legal

A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)

B. Any future physical changes, changes in the method of operation or changes in the restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

D. The permittee shall establish and maintain the property's Restricted Area as identified in plot plan submitted with the application. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

E. Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section

New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

F. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.

B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

A. The Department will assess an annual fee for this Facility. The regulation 20.2.75 NMAC set the fee amount at $1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)

B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

B104 Appeal Procedures

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm. N2153
P.O. Box 5469
Santa Fe, New Mexico 87502

B105 Submittal of Reports and Certifications

A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us.

B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)

C. Regularly scheduled reports shall be submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c), unless specifically exempted in the applicable subpart.

B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart.

B107 Startup, Shutdown, and Maintenance Operations

A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (SSM work practice plan) (20.2.7.14.A NMAC)

B108 General Monitoring Requirements

A. These requirements do not supersede or relax requirements of federal regulations.

B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke the monitoring period exemption at B108.D(2), hours of operation shall be monitored and recorded.

(1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

(2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

(3) If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during any five-year period.

E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

B109 General Recordkeeping Requirements

A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is:

(1) equipment identification (include make, model and serial number for all tested equipment and emission controls);

(2) date(s) and time(s) of sampling or measurements;

(3) date(s) analyses were performed;

(4) the qualified entity that performed the analyses;

(5) analytical or test methods used;

(6) results of analyses or tests; and

(7) operating conditions existing at the time of sampling or measurement.

B. Except as provided in the Specific Conditions, records shall be maintained on-site or at the permittee's local business office for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.

C. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):

(1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)

(2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

(3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential

to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized limit.

B110 General Reporting Requirements
(20.2.72 NMAC Sections 210 and 212)

A. Records and reports shall be maintained on-site or at the permittee's local business office unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest business office.

B. The permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):

(1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date;

(2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and

(3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.

C. The permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):

(1) any change of operators or any equipment substitutions within fifteen (15) days of such change;

(2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.

D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data

shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

E. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

B111 General Testing Requirements

A. Compliance Tests

(1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)

(2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

(3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

(4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.

(5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.

(6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

(1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:

(a) Methods 1 through 4 for stack gas flowrate

(b) Method 5 for TSP

(c) Method 6C and 19 for SO_2

(d) Method 7E for NO_X (test results shall be expressed as nitrogen dioxide (NO_2) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO_2 is equivalent to 1.194 x 10-7 lb/SCF)

(e) Method 9 for opacity

(f) Method 10 for CO

(g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).

(h) Method 7E or 20 for Turbines per 60.335 or 60.4400

(i) Method 29 for Metals

(j) Method 201A for filterable PM_{10} and $PM_{2.5}$

(k) Method 202 for condensable PM

(l) Method 320 for organic Hazardous Air Pollutants (HAPs)

(m) Method 25A for VOC reduction efficiency

(2) Alternative test method(s) may be used if the Department approves the change

C. Periodic Monitoring and Portable Analyzer Requirements

(1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

(2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

(3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.

(4) During emissions tests, pollutant, O_2 concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.

(5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

(1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.

(2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.

(3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.

(4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.

(5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.

(6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

(7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)

B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)

C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

B113 Permit Cancellation and Revocation

A. The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.

B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)

C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

B114 Notification to Subsequent Owners

A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)

B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

B115 Asbestos Demolition

A. Before any asbestos demolition or renovation work, the permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

B116 Short Term Engine Replacement

A. The following Alternative Operating Scenario (AOS) addresses engine breakdown or periodic maintenance and repair, which requires the use of a short term replacement engine. The following requirements do not apply to engines that are exempt per 20.2.72.202.B(3) NMAC. Changes to exempt engines must be reported in accordance with 20.2.72.202.B NMAC. A short term replacement engine may be substituted for any engine allowed by this permit for no more than 120 days in any rolling twelve month period per permitted engine. The compliance demonstrations required as part of this AOS are in addition to any other compliance demonstrations required by this permit.

(1) The permittee may temporarily replace an existing engine that is subject to the emission limits set forth in this permit with another engine regardless of manufacturer, model, and horsepower without modifying this permit. The permittee shall submit written notification to the Department within 15 days of the date of engine substitution according to condition B110.C(1).

(a) The potential emission rates of the replacement engine shall be determined using the replacement engine's manufacturer specifications and shall comply with the existing engine's permitted emission limits.

(b) The direction of the exhaust stack for the replacement engine shall be either vertical or the same direction as for the existing engine. The replacement engine's stack height and flow parameters shall be at least as

effective in the dispersion of air pollutants as the modeled stack height and flow parameters for the existing permitted engine. The following equation may be used to show that the replacement engine disperses pollutants as well as the existing engine. The value calculated for the replacement engine on the right side of the equation shall be equal to or greater than the value for the existing engine on the left side of the equation. The permitting page of the Air Quality Bureau website contains a spreadsheet that performs this calculation.

EXISTING ENGINE REPLACMENT ENGINE

$$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} <= \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$$

Where
g = gravitational constant = 32.2 ft/sec^2
h1 = existing stack height, feet
v1 = exhaust velocity, existing engine, feet per second
c = specific heat of exhaust, 0.28 BTU/lb-degree F
T1 = absolute temperature of exhaust, existing engine = degree F + 460
q1 = permitted allowable emission rate, existing engine, lbs/hour
h2 = replacement stack height, feet
v2 = exhaust velocity, replacement engine, feet per second
T2 = absolute temperature of exhaust, replacement engine = degree F + 460
q2 = manufacturer's potential emission rate, replacement engine, lbs/hour

The permittee shall keep records showing that the replacement engine is at least as effective in the dispersion of air pollutants as the existing engine.

(c) Test measurement of NOx and CO emissions from the temporary replacement engine shall be performed in accordance with Section B111 with the exception of Condition B111A(3) and B111B for EPA Reference Methods Tests or SectionB111C for portable analyzer test measurements. Compliance test(s) shall be conducted within fifteen (15) days after the unit begins operation, and records of the results shall be kept according to section B109.B. This test shall be performed even if the engine is removed prior to 15 days on site.

i. These compliance tests are not required for an engine certified under 40CFR60, subparts IIII, or JJJJ, or 40CFR63, subpart ZZZZ if the permittee demonstrates that one of these requirements causes such engine to comply with all emission limits of this permit. The permittee shall submit this demonstration to the Department within 48 hours of placing the new unit into operation. This submittal

shall include documentation that the engine is certified, that the engine is within its useful life, as defined and specified in the applicable requirement, and shall include calculations showing that the applicable emissions standards result in compliance with the permit limits.

ii. These compliance tests are not required if a test was conducted by portable analyzer or by EPA Method test (including any required by 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) within the last 12 months. These previous tests are valid only if conducted at the same or lower elevation as the existing engine location prior to commencing operation as a temporary replacement. A copy of the test results shall be kept according to section B109.B.

(d) Compliance tests for NOx and CO shall be conducted if requested by the Department in writing to determine whether the replacement engine is in compliance with applicable regulations or permit conditions.

(e) Upon determining that emissions data developed according to B116.A.1(c) fail to indicate compliance with either the NOx or CO emission limits, the permittee shall notify the Department within 48 hours. Also within that time, the permittee shall implement one of the following corrective actions:

i. The engine shall be adjusted to reduce NOx and CO emissions and tested per B116.A.1(c) to demonstrate compliance with permit limits.

ii. The engine shall discontinue operation or be replaced with a different unit.

(2) Short term replacement engines, whether of the same manufacturer, model, and horsepower, or of a different manufacturer, model, or horsepower, are subject to all federal and state applicable requirements, regardless of whether they are set forth in this permit (including monitoring and recordkeeping), and shall be subject to any shield afforded by this permit.

(3) The permittee shall maintain a contemporaneous record documenting the unit number, manufacturer, model number, horsepower, emission factors, emission test results, and serial number of any existing engine that is replaced, and the replacement engine. Additionally, the record shall document the replacement duration in days, and the beginning and end dates of the short term engine replacement.

(4) The permittee shall maintain records of a regulatory applicability determination for each replacement engine (including 40CFR60, subparts IIII and JJJJ and

40CFR63, subpart ZZZZ) and shall comply with all associated regulatory requirements.

B. Additional requirements for replacement of engines at sources that are major as defined in regulation 20.2.74 NMAC, Permits – Prevention of Significant Deterioration, section 7.AF. For sources that are major under PSD, the total cumulative operating hours of the replacement engine shall be limited using the following procedure:

(1) Daily, the actual emissions from the replacement engine of each pollutant regulated by this permit for the existing engine shall be calculated and recorded.

(2) The sum of the total actual emissions since the commencement of operation of the replacement engine shall not exceed the significant emission rates in Table 2 of 20.2.74 NMAC, section 502 for the time that the replacement engine is located at the facility.

C. All records required by this section shall be kept according to section B109.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.

(1) Excess Emission Form (for reporting deviations and emergencies)

(2) Universal Stack Test Notification, Protocol and Report Form and Instructions

(3) SOP for Use of Portable Analyzers in Performance Tests

C101 Definitions

A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.

C. **"Fugitive Emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

D. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.

E. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)

F. **"Natural Gas Liquids"** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)

G. **"National Ambient air Quality Standards"** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.

H. **"Night"** is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

I. **"Night Operation** or **Operation at Night"** is operating a source of emissions at night.

J. **"NO2"** or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NO_2. (20.2.2 NMAC)

K. "**NOx**" see NO_2

L. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.

M. "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.

N. **"Shutdown"**, for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

O. **"SSM"**, for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.

(1) **"Shutdown"**, for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.

(2) **"Startup"**, for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.

P. **"Startup"**, for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB	2-stroke lean burn
4SLB	4-stroke lean burn
4SRB	4-stroke rich burn
acfm	actual cubic feet per minute
AFR	air fuel ratio
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BTU	British ThermalUnit
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	continuous emissions monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulation
CI	compression ignition
CO	carbon monoxides
COMS	continuous opacity monitoring system
EIB	Environmental Improvement Board

EPA ..... United States Environmental Protection Agency
gr./100 cf ..... grains per one hundred cubic feet
gr./dscf ..... grains per dry standard cubic foot
GRI ..... Gas Research Institute
HAP ..... hazardous air pollutant
hp ..... horsepower
H_2S ..... hydrogen sulfide
IC ..... internal combustion
KW/hr ..... kilowatts per hour
lb/hr ..... pounds per hour
lb/MMBtu ..... pounds per million British Thermal Unit
MACT ..... Maximum Achievable Control Technology
MMcf/hr ..... million cubic feet per hour
MMscf ..... million standard cubic feet
N/A ..... not applicable
NAAQS ..... National Ambient Air Quality Standards
NESHAP ..... National Emission Standards for Hazardous Air Pollutants
NG ..... natural gas
NGL ..... natural gas liquids
NMAAQS ..... New Mexico Ambient Air Quality Standards
NMAC ..... New Mexico Administrative Code
NMED ..... New Mexico Environment Department
NMSA ..... New Mexico Statues Annotated
NOx ..... nitrogen oxides
NSCR ..... non-selective catalytic reduction
NSPS ..... New Source Performance Standard
NSR ..... New Source Review
PEM ..... parametric emissions monitoring
PM ..... particulate matter (equivalent to TSP, total suspended particulate)
PM_{10} ..... particulate matter 10 microns and less in diameter
$PM_{2.5}$ ..... particulate matter 2.5 microns and less in diameter
pph ..... pounds per hour
ppmv ..... parts per million by volume
PSD ..... Prevention of Significant Deterioration
RATA ..... Relative Accuracy Test Assessment
RICE ..... reciprocating internal combustion engine
rpm ..... revolutions per minute
scfm ..... standard cubic feet per minute
SI ..... spark ignition
SO_2 ..... sulfur dioxide
SSM ..... Startup Shutdown Maintenance (see SSM definition)
TAP ..... Toxic Air Pollutant
TBD ..... to be determined
THC ..... total hydrocarbons

TSP..... Total Suspended Particulates
tpy .....tons per year
ULSD .....ultra low sulfur diesel
USEPA..... United States Environmental Protection Agency
UTM.....Universal Transverse Mercator Coordinate system
UTMH.....Universal Transverse Mercator Horizontal
UTMV.....Universal Transverse Mercator Vertical
VHAP.....volatile hazardous air pollutant
VOC ..... volatile organic compounds