

**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 77414**

I. INTRODUCTION

This Class II synthetic minor air quality control operating renewal permit is issued to Freeport-McMoRan Bagdad Inc., the Permittee, for the continued operation of its open pit mine and processing facility - Bagdad Mine, located at Terminus of Highway 96, Bagdad, AZ. Permit #77414 renews and supersedes Permit #60433.

A. Company Information

Facility Name: Freeport-McMoRan Bagdad Inc.
Mailing Address: Terminus of Highway 96
Bagdad, AZ 86321
Yavapai, County
Facility Location: P.O. Box 245
Bagdad, AZ 86321

B. Attainment Classification

The area is attainment for all criteria pollutants.

II. PROCESS DESCRIPTION

A. The major processes at the Bagdad Mine include:

1. Open pit mining including drilling, blasting and hauling of ore and waste rock;
2. Crushing and conveying of ore to the mill/concentrator area;
3. Milling and concentrating of sulfide ore to produce copper and molybdenum (moly) concentrate;
4. Heap leaching of oxide ore and low-grade sulfide ore to produce pregnant leach solution (PLS);
5. Pressure leaching of concentrate to produce additional PLS; and
6. Solution extraction and electrowinning (SX/EW) to produce high purity copper cathodes from PLS

B. Control Devices

1. Scrubbers, baghouses, and dust collectors are installed to control particulate matter emissions. Fugitive dust emissions are controlled by using water sprays,

surfactants water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent controls.

2. Packed scrubbers, a flare, tank covers, and submerged filling devices are used to control volatile organic compound (VOC) emissions from the steam deoiler and the gasoline tanks.
3. Foam, blankets, surfactants, brushes, thermal retention balls, water foggers, or other effective means are used to control sulfuric acid from the SX/EW process.

III. COMPLIANCE HISTORY

During the five-year permit term that the Bagdad Mine operated under Permit No. 60433, the facility had sixteen (16) performance tests, three (3) physical inspections, and eight (8) compliance certification reviews. This facility is in compliance with the applicable permit conditions and no air quality cases or violations were issued during the permit term.

IV. EMISSIONS

The facility's PTE is provided in Table 1 below:

Table 1: Potential to Emit *

Pollutant	Primary Operating Scenario* Emissions (tons per year)	Alternate Operating Scenario 1* Emissions (tons per year)
NO _x	43.96	43.96
PM ₁₀	85.51	91.00
PM _{2.5}	65.15	82.13
CO	62.28	62.28
SO ₂	1.33	1.33
VOC	29.37	29.37
HAPs	10.41	10.41
Greatest Single HAP	5.55 (carbon disulfide CS ₂)	5.55 (carbon disulfide CS ₂)

* Emissions from Alternate Operating Scenarios 3 through 5 are either equal to or are less than these two operating scenarios such that they are not included in the PTE totals. Emissions from Alternate Operating Scenario 2 are greater than or equal to the Primary Operating Scenario and AOS1 such that they are included in the PTE totals.

V. APPLICABLE REGULATIONS

Table 3 identifies applicable regulations and verification as to why that standard applies.

Table 2: Applicable Regulations

Unit	Control Device	Rule	Discussion
Metallic Mineral Processing Operations	Scrubbers; dust collectors; water sprays, surfactants, water jets, foggers, inherent moisture content (including	A.A.C. R18-2-702.B.3 A.A.C. R18-2-702.C A.A.C. R18-2-721.B.1 A.A.C. R18-2-721.B.2 A.A.C. R18-2-721.D A.A.C. R18-2-721.F	These standards apply to existing nonferrous metals industry sources under A.A.C. R18-2-721 and metallic mineral processing plant affected

	moisture from upstream water sprays), and other equivalent controls.	40 CFR 60.8 40 CFR 60.11 40 CFR 60.382 40 CFR 60.384 40 CFR 60.385(a)-(d) 40 CFR 60.386	facilities under 40 CFR 60 Subpart LL.
Unclassified Sources Subject to A.A.C. R18-2-730	Enclosures; scrubbers; baghouses; water sprays, water jets, foggers, inherent moisture content, and other equivalent controls; covers on tanks; thermal retention balls or equivalent method to control acid emissions, flare	A.A.C. R18-2-702.B.3 A.A.C. R18-2-702.C A.A.C. R18-2-730.A.1 A.A.C. R18-2-730.B A.A.C. R18-2-730.D A.A.C. R18-2-730.F A.A.C. R18-2-730.G A.A.C. R18-2-730.H	These standards apply to unclassified sources.
Boilers, Steam Generators, Heaters, And Furnaces	N/A	A.A.C. R18-2-724.B A.A.C. R18-2-724.C A.A.C. R18-2-724.E A.A.C. R18-2-724.G A.A.C. R18-2-724.J 40 CFR 60.48c(g) and (i)	These standards apply to fossil-fuel fired industrial equipment under A.A.C. R18-2-724 and small industrial steam generating units under 40 CFR 60 Subpart Dc.
Nonmetallic Mineral Processing operations	Water sprays, surfactants, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), and other equivalent controls	A.A.C. R18-2-702.B A.A.C. R18-2-702.C A.A.C. R18-2-722.D A.A.C. R18-2-722.E A.A.C. R18-2-722.F A.A.C. R18-2-722.G 40 CFR 60.11 40 CFR 60.672(b) and (d) 40 CFR 60.674(b) 40 CFR 60.675(c)(1) and (3) 40 CFR 60.675(e)(1) and (2) 40 CFR 60.675(g) 40 CFR 60.676(b)(1) 40 CFR 60.676(f), (h), and (i)	These standards apply to existing gravel or crushed stone processing plants under A.A.C. R18-2-722 and nonmetallic mineral processing plants under 40 CFR 60 Subpart OOO.
Emergency Reciprocating Internal Combustion Engines (RICEs)	N/A	A.A.C.R18-2-719.B A.A.C.R18-2-719.C A.A.C.R18-2-719.E A.A.C.R18-2-719.F A.A.C.R18-2-719.H A.A.C.R18-2-719.I	These standards apply to existing stationary rotating machinery under A.A.C. R18-2-719, compression-ignition (CI) internal combustion engines (ICE)

		<p>A.A.C.R18-2-719.J 40 CFR 60.4202(a)(2) 40 CFR 60.4205(b) 40 CFR 60.4206 40 CFR 60.4207(b) 40 CFR 60.4209(a) 40 CFR 60.4211(a), (c), (f), and (g) 40 CFR 60.4214(b) and (d) 40 CFR 60.4231(a)(4) 40 CFR 60.4231(c) 40 CFR 60.4233(a), (c), (d), and (e) 40 CFR 60.4234 40 CFR 60.4237(b) and (c) 40 CFR 60.4243(a), (b), (d), (e), and (f) 40 CFR 60.4245(a), (b), (d), and (e) 40 CFR 63.6603(a) 40 CFR 63.6604(b) 40 CFR 63.6605 40 CFR 63.6625(e), (f), (h), (i), and (j) 40 CFR 63.6640(a) and (f) 40 CFR 63.6645(a)(5) 40 CFR 63.6650(a) and (h) 40 CFR 63.6655(e) and (f) 40 CFR 63.6660(a)-(c) 40 CFR 63.6590(c)</p>	<p>under 40 CFR 60 Subpart III, spark-ignition (SI) ICE under 40 CFR 60 Subpart JJJJ, existing emergency engines under 40 CFR 63 Subpart ZZZZ, and new emergency engines under 40 CFR 63 Subpart ZZZZ</p>
<p>Gasoline Storage Tanks Subject to A.A.C R18-2-710 and Gasoline Dispensing Facilities Subject to NESHAP Subpart CCCCCC</p>	<p>N/A</p>	<p>A.A.C. R18-2-710.B A.A.C.R18-2- 710.D A.A.C. R18-2-710.E.1 40 CFR 63.11111(a), (b), (c), (d), (e), (h), (i), and (j) 40 CFR 63.11112(a) 40 CFR 63.11113(c) 40 CFR 63.11115 40 CFR 63.11116(a), (b), and (d) 40 CFR 63.11117(a), (b), (c), (d), and (e) 40 CFR 63.11124(a)(1)</p>	<p>These standards apply to the gasoline storage tanks and the gasoline dispensing facilities.</p>

		40 CFR 63.11124(a)(2) 40 CFR 63.11125(d) 40 CFR 63.11126(b) 40 CFR 63.11132	
Fugitive dust sources	Water Trucks, Dust Suppressants, gravel application, paving, sweeping, or an equivalent control	A.A.C. R18-2 Article 6	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	This standard is applicable to any spray painting operation.
Demolition/renovation operations	N/A	A.A.C. R18-2-1101.A.12	This standard is applicable to any asbestos related demolition or renovation operations.

VI. PREVIOUS PERMIT AND CONDITIONS

A. Previous Permit Conditions

Table 4 compares the sections in Permit #60433 with the conditions in this renewal permit:

Table 4: Previous Permit Conditions

Section No.	Determination		Comments
	Revised	Delete	
Att. "A"	X		General Provisions: Revised to represent the most recent template language
Att. "B" Section I	X		Facility wide requirements: Revised to represent the most recent template language
Att. "B" Sections II and III	X		Section II and III were combined and updated as a new Section II - Metallic Mineral Processing Operations
Att. "B" Sections IV and V	X		Section IV and V were combined and updated as a new Section IV - Boilers, Steam Generators, Heaters, and Furnaces
Att. "B" Sections VI and VII	X		Section VI and VII were combined and updated as a new Section V - Nonmetallic Mineral Processing Operations
Att. "B" Section VIII	X		Unclassified Sources Subject to A.A.C. R18-2-730 – this section was updated and now is Section III
Att. "B" Section IX	X		Emergency Reciprocating Internal Combustion Engines - this section was updated and now is Section VI

Section No.	Determination		Comments
	Revised	Delete	
Att. "B" Section X	X		Gasoline Storage Tanks And Gasoline Dispensing Facilities this - section was updated and now is Section VII
Att. B Section XI	X		Fugitive Dust Requirements – Revised to represent most recent template language and now is Section VIII
Att. B Section XII		X	Mobile Source Requirements – Deleted as ADEQ has no authority to regulate mobile sources. The fugitive dust emissions from mobile sources are now addressed in the Section "Fugitive Dust Requirements".
Att. B Section XIII	X		Other Periodic Activities - Revised to represent most recent template language and now is Section IX
Att. "C"	X		Equipment List: Revised to reflect the most recent equipment operating at the facility and to include equipment information provided.
Att. "D"	X		Added - Processes with Voluntary Emission Limitations

VII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

A. Facility Wide

1. Along with the annual compliance certification, the Permittee is required to submit reports of all monitoring activities required by the permit.
2. The Permittee is required to maintain, on-site, records of the manufacturer-supplied operations and maintenance instructions and/or an Operation and Maintenance Plan for all equipment listed in the permit.

B. Metallic Mineral Processing Operations

1. Metallic Mineral Processing Subject to A.A.C. R18-2-721
 - a. The Permittee is required to keep records of the daily process rate and hours of operation of all material handling facilities.
 - b. Except for the Rock Breaker (RB), the Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C on a monthly basis for all emission units.
2. Metallic Mineral Processing Subject to NSPS 40 CFR 60 Subpart LL
 - a. The Permittee is required to operate a monitoring device to continuously measure the change in pressure of the gas stream through each operating scrubber subject to the particulate matter standard. The Permittee must record this measurement weekly.
 - b. The Permittee is required to operate a monitoring device to continuously measure the scrubbing liquid flow rate to each operating scrubber subject

to the particulate matter standard. The Permittee must record this measurement weekly.

- c. After the initial performance test of a wet scrubber, the Permittee is required to submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.
 - d. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C on a monthly basis for all emission units subject to an opacity standard.
3. For all Alternate Operating Scenarios, the Permittee is required to, contemporaneously with making the change from one operating scenario to another, record in a log a record of the scenario under which it is operating.

C. Unclassified Sources Subject to A.A.C. R18-2-730

1. Primary Venturi Scrubber CH-02 and Secondary Venturi Scrubber CH-03
 - a. The Permittee is required to calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubbers (when in operation). The Permittee must record this measurement weekly.
 - b. The Permittee is required to calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to the scrubbers (when in operation). The Permittee must record this measurement weekly.
 - c. The Permittee is required to submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.
2. Packed Scrubber 1 and Packed Scrubber 2
 - a. The Permittee is required to calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to the scrubbers (when in operation). The Permittee must record this measurement weekly.
 - b. The Permittee is required to submit semiannual reports to the Director of occurrences when the measurements of the liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.
3. Natural Gas Flare

October 8, 2019

- a. The Permittee is required to calibrate, maintain, and operate a thermocouple or any other equivalent device for the continuous measurement of temperature in the Natural Gas Flare (M-F) chamber (when in operation).
4. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C in the permit on a monthly basis for the following emission units:
 - a. Transfer of Soda Ash to the Soda Ash Storage Bin (Process #047-9);
 - b. Transfer of Lime to Lime Storage Bin 1 (Process #007-3);
 - c. Transfer of Lime to Lime Storage Bin 2 (Process #007-4);
 - d. Delivery of Ammonium Nitrate Prill to Prill Bin 1 (Process #050-1); and
 - e. Delivery of Ammonium Nitrate Prill to Prill Bin 2 (Process #050-2)
5. The Permittee is required to keep a record of which technique is used to minimize emissions from the cells associated with Electrowinning - Main System (Process #011-1).

D. Boilers, Steam Generators, Heaters, and Furnaces

1. Equipment Subject to A.A.C. R18-2-724
 - a. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C in the permit on a monthly basis and maintain records of the sulfur content of the fuel being fired for the diesel-fired equipment.
 - b. The Permittee is required to report all six-minute periods in which the opacity of any plume or effluent from the fuel burning equipment exceeds 15%.
2. Equipment Subject to 40 CFR 60 Subpart Dc
 - a. For an affected facility that combusts only natural gas, the Permittee may elect to record and maintain monthly records of the amount of each fuel combusted and the total amount of fuel delivered during each calendar month. If not, the Permittee is required to record and maintain records of the amount of each fuel combusted during each operating day. As an alternative to meeting the requirement to record fuel combusted, for an affected facility that combusts only natural gas, the Permittee may elect to record and maintain records of the total amount of fuel delivered during each calendar month. The Permittee is required to maintain these records for a period of two years following the date of such record.

E. Nonmetallic Mineral Processing Operations

1. Facilities Subject to A.A.C. R18-2-722
 - a. The Permittee is required to operate a monitoring device to measure the process weight of crushed stone produced. The Permittee must record this measurement daily.
 - b. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C **Error! Reference source not found.** in the permit on a monthly basis for all emission units.
2. Facilities Subject to NSPS Subpart OOO
 - a. For any affected facility that uses wet suppression to control emissions, the Permittee is required to perform monthly inspections to check that water is flowing to the discharge spray nozzles in the wet suppression system. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
 - b. If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry must specify the control mechanism being used instead of the water sprays.
 - c. The Permittee is required to submit to EPA a notification of the actual date of initial startup of each affected facility.

F. Emergency Internal Reciprocating Combustion Engines

1. Emergency Engines Subject to A.A.C. R18-2-719
 - a. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C in the permit on a monthly basis for all emission units.
 - b. The Permittee is required to keep appropriate records which demonstrate the daily sulfur content and lower heating value of the fuel fired in each engine and report to the Director any daily period during which the sulfur content of the fuel being fired exceeds 0.8%.
2. New Emergency Engines Subject to 40 CFR 60 Subpart IIII
 - a. Starting with the model years in Table 5 of 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee is required to keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, and record the time of operation of the engine and the reason the engine was in operation during that time.

- b. For an emergency stationary CI ICE with a maximum engine power more than 100 hp that operates for the purposes specified in Condition VI.B.4.f(4) in the permit, the Permittee is required to submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through 60.4214(d)(3).

3. New Emergency Engines Subject to 40 CFR 60 Subpart JJJJ

- a. For each SI ICE, the Permittee is required to maintain records of the following:
 - (1) All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification;
 - (2) Maintenance conducted on the engine;
 - (3) If the SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards in Condition VI.C.2 in the permit and information as required in 40 CFR Parts 90, 1048, 1054, and 1060 as applicable; and
 - (4) If the SI ICE is not a certified engine or is a certified engine operating in a non-certified manner and subject to Condition VI.C.4.a(2) in the permit, documentation that the engine meets the emission standards.
- b. For all stationary SI emergency ICE greater than or equal to 130 hp and less than 500 hp manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the Permittee is required to keep records of the hours of operation of the engine. For stationary SI emergency ICE greater than 25 hp and less than 130 hp manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the Permittee is required to keep records of the hours of operation of the engine. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
- c. For stationary SI ICE that are subject to performance testing, the Permittee is required to submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed.
- d. For an emergency stationary SI ICE with a maximum engine power more than 100 hp that operates for the purposes specified in Condition VI.C.3.c(4) in the permit, the Permittee is required to submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through 40 CFR 60.4245(e)(3).

4. Existing Emergency Engines Subject to 40 CFR 63 Subpart ZZZZ
 - a. If the engine does not meet the standards applicable to non-emergency engines, the Permittee is required to keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Records shall include how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation. If the engine is used for the purpose specified in Condition VI.D.4.d(4) in the permit, the Permittee is required to keep records of the date, start time, and end time of engine operation for this purpose.
 - b. For an emergency engine that operates for the purpose specified in Condition VI.D.4.d(4) in the permit, the Permittee is required to submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through 63.6650(h)(3).
 - c. If the Permittee elects to utilize the oil analysis program option in Condition VI.D.4.a(1) and Condition VI.D.4.b(1) in the permit, it is required to keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine.
 - d. The Permittee is required to keep records of the maintenance conducted on the engine in order to demonstrate that the engine and after-treatment control device (if any) was operated and maintained according to any developed maintenance plan.
 - e. The Permittee is required to keep each record in hard copy or electronic form for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

G. Gasoline Storage Tanks and Gasoline Dispensing Facilities

1. Gasoline Storage Tanks Subject to A.A.C. R18-2-710

For each petroleum liquid storage vessel, the Permittee is required to maintain a file of the type of petroleum liquid stored, the typical Reid vapor pressure of the petroleum liquid stored, the dates of storage, and dates when the tank is empty.

2. Gasoline Dispensing Facilities Subject to NESHAP Subpart CCCCCC

- a. For each dispensing facility, the Permittee is required to keep records of monthly gasoline throughput.
- b. The Permittee is required to record the occurrence and duration of equipment (process or control) malfunction along with the actions taken to restore the equipment to normal operation.

H. Fugitive Dust

1. The Permittee is required to keep record of the dates and types of dust control measures employed.
2. The Permittee is required to conduct the periodic opacity monitoring method specified in Condition I.C in the permit on a monthly basis for all emission units.

I. Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.
2. The Permittee is required to record the date, duration, quantity of paint used, any applicable Safety Data Sheets (SDS), and pollution control measures of any spray painting project.
3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

VIII. TESTING REQUIREMENTS

A. Metallic Mineral Processing Operations

1. Within 60 days of achieving the maximum production rate but no later than 180 days of the startup or restart, the Permittee is required to conduct performance tests for PM and PM₁₀ on the stacks of the pollution control devices listed in Condition II.C.3.a(1)-(17) in the permit, to demonstrate compliance with the emission limits in Condition II.B.2.a **Error! Reference source not found.** and/or Condition II.C.2 in the permit.
2. If the result of a performance test on the stack of a pollution control device listed in Condition II.C.3.a(1)-(17) is less than or equal to 35% of the applicable emission limits, the Permittee shall conduct a subsequent performance test for PM and PM₁₀ on the stack of that pollution control device within two years (between 22 and 26 months from the date of the previous test). If the result of a performance test on the stack of a pollution control device listed in Condition II.C.3.a(1)-(17) is greater than 35% of the applicable emission limits, the Permittee shall conduct a subsequent performance test for PM and PM₁₀ on the stack of that pollution control device within one year (between 11 and 13 months from the date of the previous test). The schedule of each subsequent test shall be reevaluated after every test.
3. For the processes in Condition II.C.3.b(1)-(7) that are operational and have been tested previously, the Permittee is required to conduct performance tests for PM and PM₁₀ on the stacks of the associated pollution control devices a minimum of once during the permit term to demonstrate compliance with the emission limits in Condition II.B.2.a and/or Condition II.C.2 in the permit.
4. If the results of the performance test required by Condition II.C.3.b are less than or equal to 70% of the applicable voluntary emission limits, no further testing is required for that control device during the permit term. If the result of any

performance test required by Condition II.C.3.b is greater than 70% of the applicable emission limits, the Permittee is required to conduct subsequent performance test(s) for PM and PM₁₀ on the stack of that pollution control device on an annual basis (between 11 and 13 months from the date of the previous test). If the result of any subsequent performance test is less than or equal to 70% of the applicable emission limits, no further testing is required for that control device during the permit term.

B. Unclassified Sources Subject to A.A.C. R18-2-730

1. The Permittee is required to conduct performance tests for PM and PM₁₀ on the Pressure Leach Vessel as controlled by the Primary Venturi Scrubber CH-02 and Secondary Venturi Scrubber CH-03 (Process #042-4) a minimum of once during the permit term.
2. The Permittee is required to conduct performance tests for VOC on the Steam Deoiler as controlled by the Packed Scrubber 1, Packed Scrubber 2, and Natural Gas Flare (Process #047-5) a minimum of once during the permit term.
3. If the results of the performance test are less than or equal to 70% of the applicable emission limits, no further testing is required for that control device during the permit term. If the result of any performance test is greater than 70% of the applicable emission limits, the Permittee is required to conduct subsequent performance test(s) for PM, PM₁₀, and/or VOC on the stack of that pollution control device on an annual basis (between 11 and 13 months from the date of the previous test). If the result of any subsequent performance test is less than or equal to 70% of the applicable emission limits, no further testing is required for that control device during the permit term.

C. Nonmetallic Mineral Processing Operations

1. For the purpose of demonstrating initial compliance with Condition V.B.2 in the permit, an initial performance test consisting of opacity observations is required to be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. The Permittee is required to conduct a repeat performance test according to 40 CFR 60.11 and 40 CFR 60.675 within 5 years from the previous performance test required in Condition V.B.6.b for fugitive emissions from affected facilities without water sprays. If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Condition V.B.6.b provided that the affected facility meets the criteria of Conditions V.B.6.d(1) and (2).

IX. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
Btu/hr	British Thermal Units per Hour
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
hr	Hour
MMBtu	Million British Thermal Units
NO _x	Nitrogen Oxides
PM _{2.5}	Particulate Matter Nominally less than 2.5 Micrometers
PM ₁₀	Particulate Matter Nominally less than 10 Micrometers
SO ₂	Sulfur Dioxide
PTE	Potential-to-Emit
TPY	Tons per Year
VOC	Volatile Organic Compound
yr	Year