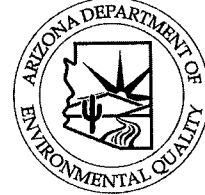


Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov



Benjamin H. Grumbles
Director

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

October 27, 2009

R.H. White
Freeport-McMoRan Morenci, Inc.
4521 US Highway 191
Morenci, AZ 85540

Dear Mr. White:

Subject: Air Quality Control Permit No. 48969
Morenci Mine - Place ID: 2512

The Arizona Department of Environmental Quality has received payment of the fee requested. Enclosed is a significant permit revision for the referenced facility. In accordance with Arizona Revised Statutes, §49-430, this significant permit revision should be readily available at all times on the premises.

The significant permit revision remains in effect until the expiration of Air Quality Control Permit No. 42474. Please continue to keep us informed of any changes that would affect your air pollution status during this period.

This decision is an appealable agency action under A.R.S. § 41-1092. You have a right to request a hearing and file an appeal under A.R.S. § 41-1092.03(B). You must file a written Request for Hearing or Notice of Appeal within **30 days** of your receipt of this Notice. A Request for Hearing or Notice of Appeal is filed when it is received by ADEQ's Hearing Administrator as follows:

Judith Fought, Hearing Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

The Request for Hearing or Notice of Appeal shall identify the party, the party's address, the agency and the action being appealed and shall contain a concise statement of the reasons for the appeal. Upon proper filing of a Request for Hearing or Notice of Appeal, ADEQ will serve a Notice of Hearing on all parties to the appeal. If you file a timely Request for Hearing or Notice of Appeal you have a right to request an informal settlement conference with ADEQ under A.R.S. § 41-1092.06. This request must be made in writing no later than **20 days** before a scheduled hearing and must be filed with the Hearing Administrator at the above address.

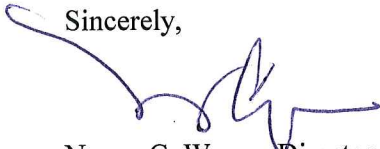
Northern Regional Office
1801 W. Route 66 • Suite 117 • Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

You are advised that this significant permit revision is a legally enforceable document. If your facility fails to comply with the provisions contained in this significant permit revision, you will be subject to enforcement action and could incur civil fines of up to ten thousand dollars per day under A.R.S. §49-463 or be subject to criminal penalties in accordance with A.R.S. §49-464.

If you have any questions, please contact the Permits Section of the Air Quality Division at (602) 771 - 2358.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Nancy C. Wrona', with a long horizontal flourish extending to the right.

Nancy C. Wrona, Director
Air Quality Division

NCW: pkt

Copy to: Shirley Rivera, EPA Region IX

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Quality Division

1110 W. Washington Street, Phoenix, AZ 85007. Phone: (602) 771-2316

SIGNIFICANT PERMIT REVISION TO AIR QUALITY CONTROL PERMIT

(As required by Title 49, Chapter 3, Article 2, Section 49-426, Arizona Revised Statutes)

This air quality control permit does not relieve applicant of responsibility for meeting all air pollution regulations

1. PERMIT TO BE ISSUED TO (Business license name of organization that is to receive permit) _____

Freeport-McMoRan Morenci, Inc.

2. NAME (OR NAMES) OF OWNER OR PRINCIPALS DOING BUSINESS AS THE ABOVE ORGANIZATION _____

Freeport-McMoRan Morenci, Inc.

3. MAILING ADDRESS **4521 U.S. Highway 191**

Morenci, AZ 85540

4. ORIGINAL EQUIPMENT LOCATION/ADDRESS **4521 U.S. Highway 191,**

Morenci, AZ 85540

5. FACILITIES OR EQUIPMENT DESCRIPTION **Copper Mining Facility**

6. THIS PERMIT ISSUED SUBJECT TO THE FOLLOWING **Conditions as described in attached**

7. ADEQ SIGNIFICANT REVISION NUMBER **48969** PERMIT CLASS **I**

SIGNIFICANT REVISION ISSUED THIS **27th** DAY OF **October**, 2009

SIGNATURE

Nancy C. Wrona, Director, Air Quality Division

TITLE

SIGNIFICANT PERMIT REVISION DESCRIPTION

This significant permit revision for Freeport-McMoRan Morenci Inc. (FMMI) authorizes the company to use a 565 KW (757 HP) emergency diesel-fired engine at the Morenci facility. This engine will be used to provide power to the management command center and computers in the event of outside commercial power interruption or unreliability issues. This engine will be operated for a maximum of 300 hours in a year.

The above addition will result in potential emissions increase of 0.65 tons per year of carbon monoxide (CO), 1.2 ton per year of nitrogen oxides (NO_x) and non-methane hydrocarbons (NMHC), 0.05 tons per year of sulfur dioxide (SO₂), and 0.04 tons per year of particulate matter (PM). Though there is an increase in the emission of all the criteria pollutants, the increases are below the significant thresholds provided in A.A.C. R 18-2-101(106).

ATTACHMENT "B" SPECIFIC CONDITIONS

Addenda (Significant Permit Revision #48969) to Operating Permit #42474 for Freeport-McMoRan Morenci Inc. - Morenci Mine

The following Condition XV shall be added in the requirements set forth in Attachment "B" of the Operating Permit #42474:

XV. DIESEL GENERATOR

A. Applicability

This Section is applicable to the CI engine identified as "New" and listed in Table C-15, Operation #015- Diesel Generator, Attachment "C" of this Permit.

B. Voluntarily Accepted Limitation

1. Type of Fuel [A.A.C. R18-2-306.01.A, -306.A.2, & -331.A.3.a]
[Material permit conditions are indicated by underline and italics]

The Permittee shall burn only diesel fuel in the compression ignition engine.

2. Operating Hours [A.A.C. R18-2-306.01.A and -331.A.3.a]
[Material permit conditions are indicated by underline and italics]

The Permittee shall not operate the engine for more than 300 hours in a rolling twelve- month period.

3. Monitoring, Reporting and Recordkeeping requirements [A.A.C. R18-2-306.A.3.c]

The Permittee shall keep a monthly record of the hours of operation of the engine. At the end of each month, a 12-month rolling total of hours of operation of the engine shall be computed.

C. General Requirements

1. Operating Requirements

a. The Permittee shall operate and maintain the engine over its entire life according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. A copy of the instructions or procedures shall be kept onsite and made available to ADEQ upon request.

[40 CFR 60.4206, 4211(a), and A.A.C. R18-2-306.A.3]

b. The Permittee shall only change those engine settings that are permitted by the manufacturer.

[40 CFR 60.4211(a)]

c. The Permittee shall meet the requirements of 40 CFR parts 89, 94, or 1068, as they apply.

[40 CFR 60.4211(a)]

d. Fuel Requirements

(1) The engine shall use diesel fuel that meets the following requirements of 40 CFR 80.510(a):

(a) Sulfur content: 500 parts per million (ppm) maximum; and

(b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(a)]

(2) After October 1, 2010, the engine shall use diesel fuel that meets the following requirements of 40 CFR 80.510(b):

(a) Sulfur content: 15 ppm maximum; and

(b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

e. Additional Emergency Engine Requirements

[Material permit conditions are indicated by underline and italics]
[40 CFR 60.4211(e), 60.4209(a), A.A.C. R18-2-306.A.3.c, -306.A.4, and -331.A.3.c]

(1) *The Permittee shall install a non-resettable hour meter prior to startup of the engine.*

(2) Emergency engines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

- (3) The Permittee shall not operate the emergency engine for the purposes of maintenance checks and readiness testing for more than 100 hours per year unless the Permittee maintains records identifying the Federal, State, or local standards that require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. Copies of such records shall be provided to ADEQ upon request.
- (4) The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year.
- (5) The Permittee shall not operate emergency engines except for emergency purposes, and maintenance and testing.
- (6) The Permittee shall maintain monthly records of engine operation. The records shall include the purpose of operation and the duration of time the engine was operated. The record shall identify whenever the operation of the engine was for emergency purposes.

2. Emission Limitations and Standards [40 CFR 60.4202.a]

- a. Nitrogen Oxides (NO_x) and Non-methane hydrocarbons (NMHC) [40 CFR 89.112]

The Permittee shall limit the combined emissions of NO_x and NMHC below 6.4 gm/kW-hr from the emergency engine.

- b. Carbon Monoxide (CO) [40 CFR 89.112]

The Permittee shall limit the emission of CO below 3.5 gm/kW-hr from the emergency engine.

- c. Particulate Matter (PM) [40 CFR 89.112]

The Permittee shall limit the emission of PM below 0.2 gm/kW-hr from the emergency engine.

- d. The Permittee shall limit exhaust opacity from the emergency engine to not to exceed: [40 CFR 89.113]

- 1) 20 percent during the acceleration mode;
- 2) 15 percent during the lugging mode; and

- 3) 50 percent during peaks in either the acceleration or lugging exhaust opacity modes.

3. Monitoring and Record Keeping Requirements

- a. The Permittee shall comply by purchasing an engine certified to the emission standards in Condition XV.C.2. The engine shall be installed and configured according to the manufacturer's specifications. [40 CFR 4211(c)]
- b. The Permittee shall maintain a copy of engine certifications or other documentation demonstrating that the engine complies with the applicable standards in this Permit, and shall make the documentation available to ADEQ upon request. [A.A.C. R18-2-306.A.4]
- c. The Permittee shall keep records of fuel supplier specifications. The specifications shall contain information regarding the name of fuel supplier, sulfur content, and cetane index or aromatic content in the fuel. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c]

4. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4202(a)(2), 60.4206, 60.4207(a) & (b), 60.4209(a), 60.4211(a), (c), & (e), 89.112, and 89.113.

ATTACHMENT "C"
EQUIPMENT LIST

**Addenda (Significant Permit Revision #48969) to Operating Permit #42474 for
Freeport-McMoRan Morenci Inc. - Morenci Mine**

The following equipment shall be added to the Equipment List, Attachment "C", in the operating permit #42474.

TABLE C-15 OPERATION #015- DIESEL GENERATORS

Process No.	Equipment	Make	Model	Serial No.	Year of Manufacture	Rated Capacity	Existing/New
262	Emergency Diesel Engine	AB Volvo Penta	TAD1641GE	N/A	2008	565 KW	New

