



Janice K. Brewer  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Patrick J. Cunningham  
Acting Director

**CERTIFIED MAIL  
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AQD:PS:CTS: 191673

**April 14, 2009**

Mr. Allan F. Tittes  
Freeport-McMoRan Copper & Gold  
P. O. Box 4444  
Claypool, AZ 85532

**FILE COPY**

Subject: Air Quality Control Minor Permit Revision No. 48448  
(Revision to Permit No. 1000046 as revised by Significant Permit Revision No. 29622)  
Miami Smelter - Place ID: 5129

Dear Mr. Tittes:

The Arizona Department of Environmental Quality (ADEQ), Air Quality Division, has completed its review of your application for a minor permit revision to Permit No. 1000046 and has determined that the request meets the criteria for coverage under a minor revision and such changes are approved.

Enclosed is the permit revision for the Freeport-McMoRan Miami Inc. Smelter Facility, located in Gila County, Arizona. In accordance with Arizona Revised Statute §49-430, this revision to the permit shall be readily available at all times on the premises.

You are advised that this permit revision is a legally enforceable document. If your facility fails to comply with the provisions contained in this Permit revision, you may be subject to enforcement action and could incur civil fines under the Arizona Revised Statutes.

If you have any questions regarding this matter, please contact Andy Fritz at (602) 771-2322 or me at (602) 771-2308.

Sincerely,

Nancy C. Wrona, Director  
Air Quality Division

NCW: afl

CC: Shirley F. Rivera, EPA Region 9

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

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400 West Congress Street • Suite 433 • Tucson, AZ 85701  
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**Minor Revision No. 48448**  
**to**  
**Operating Permit No. 1000046**  
**for**  
**Freeport-McMoRan Miami Inc. Smelter Facility Air Quality Permit**

**MINOR PERMIT REVISION DESCRIPTION**

This minor permit revision for the Freeport-McMoRan Inc. (FMMI) copper smelter facility in Miami, Arizona authorizes the screening of copper-containing materials (non-ferrous metals industry) in addition to the currently permitted gravel and crushed stone materials. The minor permit revision involves a use change with the existing Screening Machine Equipment which results in the following changes to the Operating Permit No. 1000046.

The change meets all the gatekeepers of A.A.C. R 18-2-319.A.

**ATTACHMENT "B"**  
Addenda (Minor Revision) to Air Quality Permit No. 1000046

The following is a new Section and will be added to the Attachment "B" of Air Quality Operating Permit No. 1000046 as amended by the Significant Permit Revision No. 29622:

**XXII. Copper-Containing Material Screening Machine**

This Section applies to the Screening Machine when the Screening Machine is used to screen copper-containing material. When non-copper containing material is screened, the equipment is subject to Section XIX of this Attachment.

**A. Emission Limits/Standards**

Particulate Matter (PM/PM<sub>10</sub>) and Opacity

1. The opacity of any plume or effluent from any process source subject to the provisions of this Section shall not be greater than 20% as measured by EPA Reference Method 9.  
[A.A.C. R18-2-702.B.3]
2. If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirements in XXI.A.1 above, the exceedance shall not constitute a violation of the applicable opacity limit.  
[A.A.C. R18-2-702.C]
3. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from the Screening Machine subject to the provisions of this Section in total quantities in excess of the amounts calculated by one of the following equations:
  - a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55P^{0.11} - 40$$

where E and P are defined as indicated in subsection 3.a above.

[A.A.C.R18-2-721.B.2]

## B. Air Pollution Control

The Permittee shall as necessary maintain and operate spray bars on the screen to minimize particulate matter emissions.

[A.A.C.R18-2-306.A.2]

## C. Monitoring, Recordkeeping, and Reporting Requirements

### 1. Biweekly monitoring for point sources

- a. The Permittee shall use the most recent established baseline opacity levels as reported to the Director on September 26, 2005, unless new baseline opacity levels have been established per Condition XXII.C.1.h below.
- b. A Certified Method 9 observer shall conduct a bi-weekly (once in two weeks) visual survey of visible emissions from the Screening Machine when the screen is operating. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
- c. If the observer sees a plume that on an instantaneous basis appears to exceed the baseline opacity level, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.
- d. If the six-minute opacity of the plume is less than the baseline opacity level, the observer shall make a record of the following:
  - (1) Name of the observer, location, date, and time of the observation; and
  - (2) The results of the Method 9 observation.
- e. If the six-minute opacity of the plume exceeds the baseline opacity level but is less than the applicable opacity standard, the Permittee shall adjust or repair the controls or equipment to reduce opacity to or below the baseline opacity level. The observer shall make a record of the following:
  - (1) Name of the observer, location, date, and time of the observation;
  - (2) The results of the Method 9 observation;
  - (3) Date and time when corrective action was taken; and
  - (4) Type of corrective action taken.
- f. If the six-minute opacity of the plume exceeds the applicable opacity standard, then the Permittee shall do the following:

- (1) Adjust or repair the controls or equipment to reduce opacity to or below the baseline level; and
  - (2) Report it as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
- g. If corrective actions fail to reduce opacity to or below the baseline level, the Permittee shall adopt the following course of action:
- (1) document all corrective action; and
  - (2) initiate procedures to re-establish the baseline within forty eight hours in accordance with Condition XXI.C.1.h below.
- h. If necessitated by the results of the bi-weekly monitoring, the Permittee may reestablish the baseline opacity level(s). Reestablishment of the baseline(s) shall be performed utilizing the same procedures used in setting up the initial baseline level(s). Within 30 days of re-establishing the baseline opacity, the Permittee shall report the results to the Director. The report shall also contain a description of the need for re-establishing the baseline(s).

[A.A.C. R18-2-306.A.3.c, 306.A.4 and 306.A.5]

#### D. Daily Monitoring and Recordkeeping

The Permittee shall maintain a daily record of the amount and type of material processed through the Screening Machine.

[A.A.C. R18-2-306.A.3.c and 306.A.4.]