

Aquifer Protection Permit P-102896  
Place ID 9542, LTF 67713  
Significant Amendment  
**Freeport-McMoRan Bagdad Hillside Loadout Facility  
Southeast Containment Pond**

The Arizona Department of Environmental Quality, Groundwater Protection Value Stream proposes to issue an amendment to an aquifer protection permit for the subject facility that covers the life of the facility, including operational, closure, and post closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. This document gives pertinent information concerning the issuance of the permit. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

## I. FACILITY INFORMATION

### Name and Location

Permittee's Name:	Freeport-McMoRan Bagdad, Inc. (FMBI)
Mailing Address:	P.O. Box 245 Bagdad, AZ 86321
Facility Name and Location:	Freeport-McMoRan Bagdad Hillside Loadout Facility Southeast Containment Pond 18 miles southeast of Bagdad, Arizona, near the town of Hillside, Arizona

### Amendment Description

The purpose of this amendment is to make the following changes to the permit:

1. Change the permittee from Phelps Dodge to Freeport-McMoRan Bagdad, Inc. (FMBI)
2. Change the name of the Truck Wash Impoundment to the Southeast Containment Pond
3. Update the closure strategy so that it doesn't include the reclamation of structures that are not discharging facilities
4. Update the closure and post-closure cost estimates based on the updated closure strategy
5. Reduce the inspection frequency from monthly to quarterly

6. Reduce the monitoring frequency of the leak collection system from monthly to quarterly
7. Eliminate monitoring at the “ambient” monitoring well (HMW-798)
8. Correct the aquifer quality limit for selenium; change from 0.005 to 0.05 mg/l
9. Update the facility operational status to “temporary cessation”
10. Update the permit to include the current framework language.
11. Include compliance schedule items for cost estimate updates, financial assurance updates, and pond liner evaluation and monitoring updates prior to operation.

### **Regulatory Status**

The loadout facility is in temporary cessation and has not been used since 1998. However, FMBI is keeping the facility available for future use and has continued to conduct the routine monitoring and inspections as required by the permit.

### **Facility Description**

The Hillside Loadout Facility is owned and operated by FMBI and formerly served as the railroad loading point for shipping copper sulfide concentrates produced by the Bagdad Mine concentrator. Copper concentrates were hauled from the mine to Hillside by trucks and were either temporarily stockpiled at the facility or loaded directly into railcars for transport to off-site smelters. Facilities at the Hillside Loadout Facility include a truck wash rack and the Southeast Containment Pond. Wash water from the truck wash rack area discharges to an oil/water separator and concrete-lined sump before ultimately discharging to the Southeast Containment Pond, the only APP discharging facility at the site.

## **II. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY**

A description of the BADCT used for Southeast Containment Pond can be found in the permit in Section 4, Table 4.1.1. No changes are required as part of this amendment.

## **III. COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS**

No changes to the groundwater monitoring at the point of compliance are required as part of this amendment.

## **IV. STORM WATER AND SURFACE WATER CONSIDERATIONS**

No changes to the storm water controls are required as part of this amendment.

## **V. COMPLIANCE SCHEDULE**

The Compliance Schedule is provided in Section 3.0 of the permit.

## **VI. OTHER REQUIREMENTS FOR ISSUING THIS PERMIT**

### **Technical Capability**

FMBI has demonstrated the technical competence necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A202(B). This requirement is a part of an ongoing demonstration of technical capability. The permittee is expected to maintain technical capability throughout the life of the facility.

### **Financial Capability**

FMBI has demonstrated the financial responsibility necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee is expected to maintain financial capability throughout the life of the facility. The Groundwater Value Stream approved the closure cost in the amount of \$128,000 and a post-closure cost of \$0.00 based on clean closure of the facility.

The financial capability demonstration for this permit is unique in that it is included in the demonstration made for the Bagdad Mine area-wide permit (APP 105258). The closure cost for this facility included in the area-wide permit is \$746,000. Because the closure cost estimate approved in this amendment is \$128,000 based on the revised closure strategy, a new financial demonstration for this permit amendment is not necessary.

The compliance schedule for this permit requires periodic updates to the cost estimate and periodic demonstrations of financial capability.

### **Zoning Requirements**

Mining activity of greater than five contiguous acres is exempt from zoning requirements pursuant to A.R.S. § 11-812.

## **VII. ADMINISTRATIVE INFORMATION**

### **Public Comment Period (A.A.C. R18-9-109(A))**

The aquifer protection program rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to ADEQ. After the closing of the public comment period, ADEQ is required to respond to all significant comments.

### **Public Hearing (A.A.C. R18-9-109(B))**

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

## **VIII. ADDITIONAL INFORMATION**

Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality  
Water Quality Division – Groundwater Protection Value Stream  
Attn: Maribeth Greenslade  
1110 W. Washington St., Mail Code 5415B-3  
Phoenix, Arizona 85007  
Phone: (602) 771-4578