

Carlota Copper Project – Pinto Valley Road
Aquifer Protection Permit No. P-102640
Place ID 1978, LTF No. 91539
Significant Amendment

I. Introduction:

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) 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. 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.

II. Permittee & Facility Location:

The Carlota Copper Project – Pinto Valley Road mine is located near the Town of Miami in Gila and Pinal Counties, Arizona.

III. Facility Description:

The Carlota Copper Project – Pinto Valley Road consists of a heap leach pad, a solvent extraction-electrowinning (SX EW) process plant, two pregnant leach solution (PLS) ponds, one raffinate pond, rock disposal facilities, and associated pipelines, tanks, administration and maintenance facilities. The facilities associated with the mine are located in portions of the Pinto Creek and Powers Gulch drainages. Open-pit mining takes place within the open pits. Mining operations include drilling, blasting, loading, and haul truck transport of ore to the heap leach pad.

IV. Amendment Description:

The purpose of this amendment is to:

1. Remove Point of Compliance (POC) monitoring wells AMW-13 and BMW-5 from the permit. These POC wells were installed to monitor groundwater in the vicinity of the East Sediment Basin (ESB), a discharging facility that was closed and removed from the permit during a previous amendment in April 2021. These POC wells are no longer required for monitoring groundwater since the ESB was closed.
2. Update the latitude and longitude of the remaining POC monitoring wells to reflect new data.
3. Revise Table 12, Facility Inspections and Operational Monitoring, to remove the vegetation monitoring for the Main PLS Pond since it is an underground facility.
4. Revise Table 12, Facility Inspections and Operational Monitoring, to change the vegetation inspections for the Plant PLS-SX Pond, Raffinate Pond, and Underdrain System Impoundment from weekly to monthly, and specify monitoring vegetation that may affect the pond liners.

The removal of POC wells are considered a “Significant” amendment per A.A.C. R18-9-A211(B). The text revisions for the POC well latitude and longitude and inspection monitoring language are included as part of this amendment.

V. Regulatory Status

There are no current enforcement actions.

VI. Best Available Demonstrated Control Technology (BADCT):

The BADCT requirements for the discharging facilities are not changing from the current permit. The heap leach pad and process solution ponds are lined. The waste rock dumps are operated to isolate acid generating material within the rock dump and away from the edges.

VII. Compliance with Aquifer Water Quality Standards (AWQS):

The changes to the points of compliance are described in Section IV as part of this amendment. Compliance with AWQS will continue to be monitored at the existing POCs.