



EPA

Cyprus Tohono Mine Site

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION IX • NOVEMBER 2005

U.S. EPA Proposes Alternatives for Closure of Ponds at CT Mine Site

At the direction of the United States Environmental Protection Agency (U.S. EPA), Cyprus Tohono Corporation (CT) has completed a document that analyzes alternatives for closure of the Evaporation and Mill Tailings Ponds at the mine site near North Komelik, Arizona. This document is called a Final Draft Engineering Evaluation and Cost Analysis (EE/CA).

U.S. EPA has developed the EE/CA in order to identify alternatives – known as “removal action alternatives” – for cleaning up contaminated sections of the CT mine site. Once U.S. EPA has approved the recommended removal action alternative, construction will commence for the closure and reclamation of the Evaporation Ponds and Mill Tailings Pond.

U.S. EPA invites you to review and comment on the EE/CA through November 30, 2005. Send your comments to John Hillenbrand, U.S. EPA Project Manager, listed at the end of this fact sheet. You may also submit your comments verbally and in written form at either of the November 14, 2005 meetings listed below. You can review a copy of the EE/CA at the District Office in North Komelik Village, or at the Tohono O’odham Nation Environmental Protection Agency offices in Building 41 at the BIA compound in Sells, AZ.



Public Meetings

Please come to U.S. EPA’s Public Meeting or Tohono O’odham Legislative Council meeting on removal action alternatives for the Evaporation Ponds and Mill Tailings Pond at Cyprus Tohono Mine Site.

Legislative Council Meeting

Monday, November 14, 2005

1:00 pm - 2:30 pm

Legislative Council Chambers

Main Street

Sells, AZ

Public Meeting in North Komelik

Monday, November 14, 2005

6:00 p.m. - 8:30 p.m.

Sif Oidak District Office

Federal Route 15

N. Komelik Community

What is the Purpose of the EE/CA Document?

The purpose of the EE/CA is to identify and evaluate alternatives so that U.S. EPA can select the best alternative to control or reduce the threat of release of contaminants from the ponds to the environment. The evaluation criteria are effectiveness, implementability and cost. The preferred alternative will reduce the potential risk posed by the threatened releases to human health and the environment. This work is

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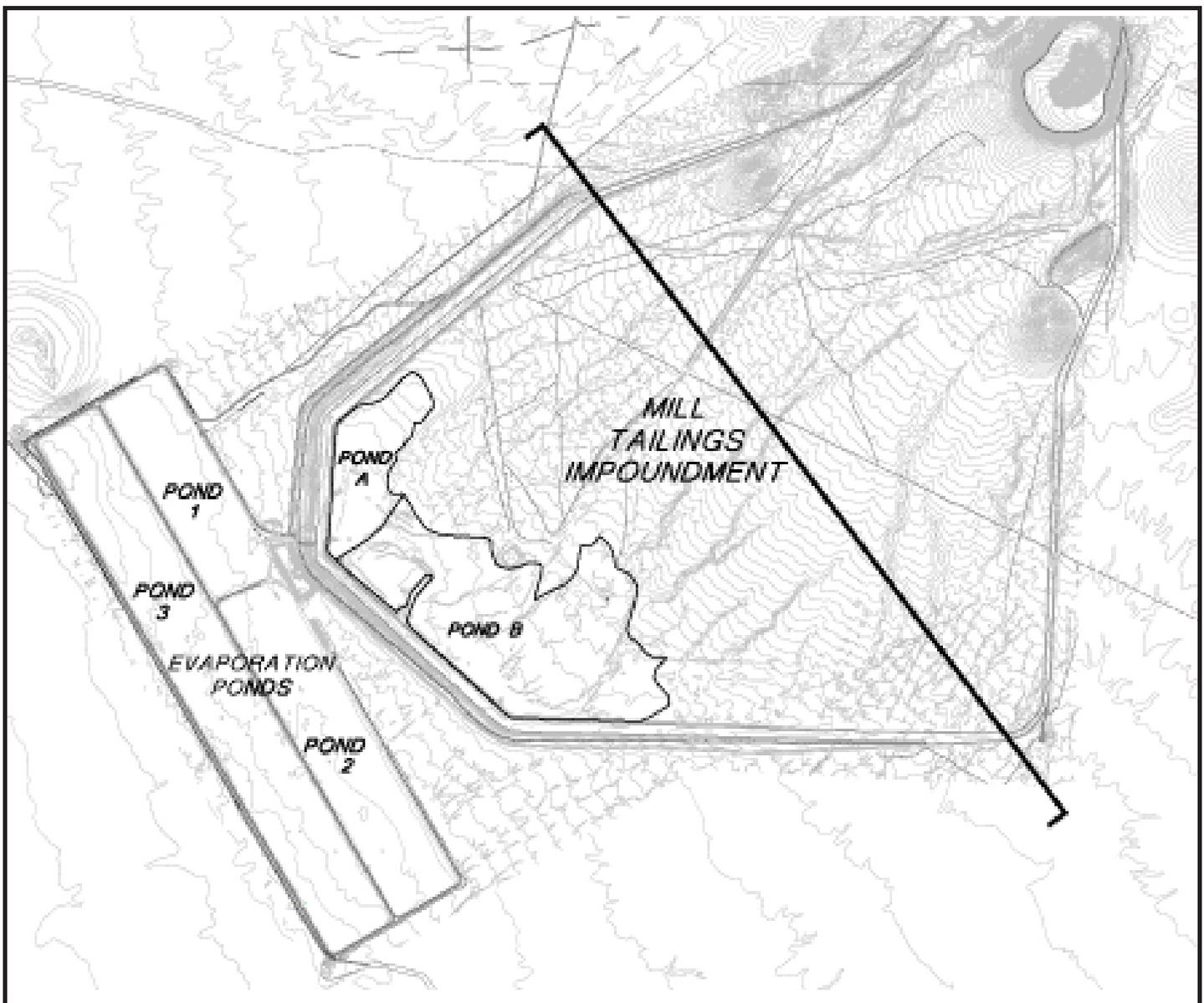
taking place at the CT mine site, which is located near North Komelik on lands leased from the Tohono O'odham Nation (TON), 32 miles southwest of Casa Grande, AZ.

The EE/CA focuses on three Evaporation Ponds and a Mill Tailings Pond, which were constructed in 1975. The three Evaporation Ponds were used for storage of excess process waters. Upon evaporation, the waters formed salts that extend to depths of between 2 and 7 feet. The Mill Tailings Pond collected various types of process water, vat leach wash solutions, cementation

copper bleed solutions, stormwater and mill tailings from the mining operation. The EE/CA also includes closure of tailings pond embankment which is constructed of vat leach tailings.

Prior testing suggests that the salts in the Evaporation Ponds and in the Mill Tailings Pond may produce acidic drainage as well as a leachate with elevated concentrations of metals and sulfate. When the ponds have filled with enough liquid, leachate fluids have the potential to leak from the ponds resulting in high sulfate and uranium concentrations in the groundwater.

Cyprus Tohono Mine site features



What is the Scope of the Ponds Closure?

U.S. EPA intends to close the ponds with the primary goals of:

- Reducing possible future impacts to groundwater and air.
- Achieving protective groundwater quality and air quality levels.
- Restoring the ponds to stable conditions where vegetation and animals can be reestablished.
- Restoring the ponds to productive outdoor recreation and grazing uses for the TON.

U.S. EPA is considering closure alternatives other than no action that include: 1) soil cover only; 2) In-place salt treatment and soil cover; 3) Salt removal off site and soil cover; 4) Soil cover over a plastic cover; 5A-E) Partial salt removal and on-site placement on a plastic liner in one

of five possible areas around the mine, followed by soil cover. 6) Salt removal and on-site placement on a plastic liner next to the existing heap leach pad, followed by soil cover. Alternative 6 is the preferred alternative based on the information contained in the EE/CA.

Closure activities common to all the above action alternatives include:

- Regrading of the ponds' surfaces, with construction of a containment berm upstream from the project area.
- Cover placement over impacted areas, including fertilization and mulching.
- Revegetation on areas where soil cover is constructed, as well as on other disturbed areas. Drought-resistant and native plants will reduce erosion and increase evapotranspiration (occurs when plants secrete water through their leaves).
- Installation of storm water controls to reduce erosion, infiltration and sediment transport.
- Placement of fencing to protect revegetated areas.

What is the Project Removal Timeline?

DATE	TASK
Nov 2005	Public submits comments.
Sept to Oct 2005 ...	Commence Final Engineering Design.
February 2006	Complete Final Engineering Design.
March 2006	Complete bidding process.
Late-March 2006 ...	Commence construction.
June 2007	Complete construction.

How Can the Community Participate?

- Read the Final Draft EE/CA.
- Submit your public comments on the EE/CA to the U.S. EPA through November 30, 2005.
- Attend the Public Meeting to discuss the removal action alternatives.



Site Background

Development of what is now known as the CT Mine site began in the 1880s when low-grade oxide ore was mined from surface outcrops. During the 1950s and 60s, Trans-AZ operated a small open pit copper oxide mine. In the late 1960s, Trans-AZ and the El Paso Natural Gas Company enlarged the open pit for removal of 350,000 tons of ore. Mining continued into the 1980s, with several changes of operators. CT began operating the property in 1987, after leasing it from TON. It expanded the open pit mining activities and heap leaching operations. Since January 2005, CT has continued with the extraction/electrowinning operations for processing heap solutions.

A number of remediation and removal actions have taken place at the CT site. These include the construction of a solution containment system in 2000, the implementation of a wildlife management program beginning in 2001, the installation of domestic groundwater wells for the Village of N. Komelik in 2002, and completion of a temporary water treatment plant for pit lake waters in 2004.

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