UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06

Site Name: Tyrone Mine **CERCLIS ID#:** NMD986684264

Alias Site Name:

Address: 10 miles southwest of Silver City

City/County or Parish/State/Zip: Silver City/New Mexico

Report Type: File Reassessment **Date:** 06/14/2012 **Author:**

RECOMMENDATION:

☒ 1. No Further Remedial Action Planned Under Superfund (NFRAP)

☐ 2. Further Investigation Needed Under Superfund
☐ PA ☐ HRS Priority: ☐ High
☐ SI ☐ RI/FS ☐ Low
☐ ESI ☐ RA
☐ Other:
To be performed by:

☐ 3. Action Deferred to: ☐ RCRA ☐ NRC

☐ 4. Site Being Addressed Under the State Voluntary Cleanup Program (VCP): ☐ Yes ☐ No

NOTIFY AUTHORITY:

☐ Removal	☐ RCRA	☐ TSCA	☐ CAA	☐ SMCRA
☐ Remedial	☐ State/Tribe	☐ NPDES	☐ NRC	☐ Resource Trustee:
☐ CERCLA Enforcement	☐ Federal Facility	☐ UIC	☐ SPCC	☐ Other:

SEND SSSR COPIES TO: ☐ 6SF-AC ☐ 6WQ-SP ☐ ATSDR ☐ State Agency ☐ Tribal Agency

DISCUSSION:

A file reassessment was conducted by EPA Superfund. The Tyrone Mine located in Silver City, New Mexico, is an active mine location, that was originally opened in 1871 when turquoise and copper were discovered. Phelps Dodge Corporation, which owned the entire district, took charge of the mine in 1912 or 1913. The mine was closed in 1926 and reopened in 1969 as an open-pit mine. The mine area is approximately 3 miles in diameter and consists of an open-pit, leach dumps and 7 tailings ponds/piles. Reclamation activities in certain areas of the site started in 2004, as mandated by requirements of the New Mexico Environment Department and the New Mexico Energy, Minerals & Natural Resources Department's Mining and Mineral Division. With the involvement of the New Mexico state agencies at this site, it is recommended that the site received a designation of "No Further Remedial Action Planned" (NFRAP) in the CERCLIS database and be referred back to the State of New Mexico for any further actions under their authority.

APPROVALS:

Report Reviewed by: LaDonna Turner (Site Assessment Manager) **Signature:** LaDonna Turner **Date:** 07/26/13

Disposition Approved by: Chris Villarreal (Section Chief 6SF-TR) **Signature:** Chris Villarreal **Date:** 7/26/13

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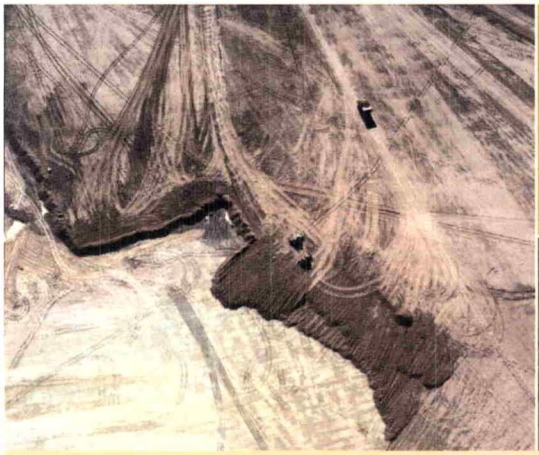


FREEPORT-MCMORAN COPPER & GOLD

Tyrone Facts from FCX

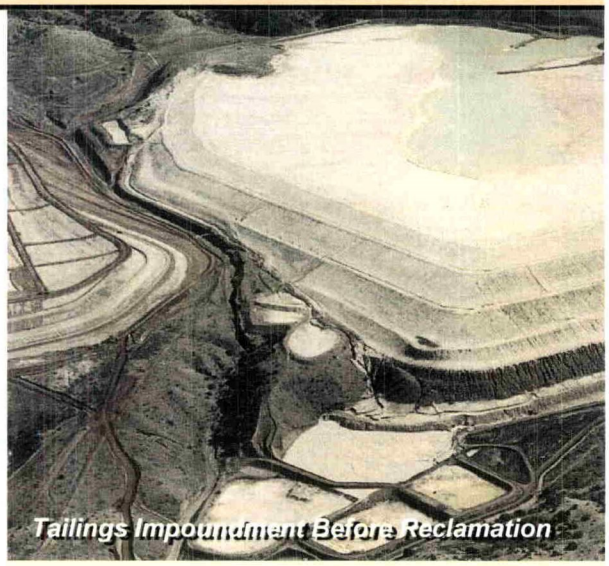
Reclamation at Tyrone Tailings and Rock Stockpiles

www.fcx.com

February 2011

Since 2004, old tailings impoundments and rock stockpiles have been undergoing major changes at the Tyrone Mine.

- Tailings covering about 2,400 acres at Tyrone have now been reclaimed – completing one of the largest mine reclamation projects in the United States. In addition, large rock stockpiles around the perimeter of the mine are being reclaimed.
- The tailings project is the first to be completed. Tailings are the sandy residual from extracting copper-bearing minerals from ore. Tailings were produced from 1969 until 1992, and this material was deposited within six large impoundments north of the mine.
- Reclamation activities at Tyrone are mandated by requirements of the New Mexico Environment Department and the NM Energy, Minerals & Natural Resources Department's Mining & Minerals Division.
- As a first step in the tailings reclamation process, earthmoving equipment graded side slopes on the impoundments and prepared them for capping with soil and the development of storm water diversions. Diversions are critical to ensure soil capping is not washed off, cutting into the underlying tailings. Finally, the entire area was reseeded with native grasses and shrubs, with a post-mining land use as wildlife habitat.
- Today, native grasses can be seen growing on areas that were once barren, white-colored tailings.
- In addition, Tyrone is undertaking the reclamation of rock stockpiles, chiefly around the south and east perimeter of the operation. Also, the company has removed old mining facilities including mineral processing plants, shops and other structures that are not needed for current copper production.



Tailings Impoundment Before Reclamation

What is the purpose of reclamation?

Tailings impoundments and rock stockpiles may contain sulfide minerals that can react with storm water runoff to potentially impact surface and groundwater. Capping these sites with soil, promoting vegetation growth and managing storm water runoff will help to protect surface and ground waters for future generations.

Tailings Impoundment After Reclamation