

Freeport-McMoRan Chino Mines Company
P.O. Box 10
Bayard, NM 88023

Sherry Burt-Kested
Manager, Environmental Services
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July 26, 2019

Certified Mail #70182290000117903556
Return Receipt Requested

Ms. Rebecca Roose, Director
New Mexico Environment Department
Water Protection Division
P.O. Box 5469
Santa Fe, New Mexico 87502

Dear Ms. Roose:

Re: Freeport-McMoRan Chino Mines Company
AOC Quarterly Report, Second Quarter 2019

This Administrative Order on Consent (AOC) Quarterly Report documents activities performed during the reporting period from April 1 through June 30, 2019. The report is submitted and organized as outlined in Article IX, Section E of the AOC between the New Mexico Environment Department (NMED) and Freeport-McMoRan Chino Mines Company (Chino). Chino also submits a copy of this report to the New Mexico Energy, Mineral and Natural Resources Department, Mining and Minerals Division (MMD), per its request.

AOC Activities

During the second quarter of 2019, the following major activities occurred:

- NMED provided conditional approval of the Vegetation Monitoring Report for the Hurley Railroad Interim Remedial Action under Smelter/Tailing Soils Investigation Unit (STS IU).
- Chino submitted a Revised Vegetation Monitoring Report for the Hurley Railroad Interim Remedial Action under STS IU.
- Chino completed the construction phase of excavation and backfill processes for the IRA under Hanover/Whitewater Creek Investigation Unit (HWC IU).
- Chino initiated the B Ranch IRA, under STS IU, with 30% completion of the construction removal phase at the end of the second quarter.
- NMED requested habitat and presence/absence surveys for the Chiricahua Leopard Frog to address uncertainties identified in the *Ecological Risk Assessment* for the Lampbright Investigation Unit (LIU).
- Chino performed quarterly post-remediation monitoring of the Razorback Ridge Interim Remedial Action site under the STS IU.
- Chino performed quarterly post-reclamation and remedial monitoring of the Groundhog Mine Site and the Historic Small Stockpile sites under the HWC IU.
- Chino performed quarterly post-remediation monitoring of the Hurley Railroad Site under the STS IU.
- The CWG participated in their annual AOC site visit and toured the Whitewater Creek IRA sites. The group met on May 14, 2019.
- The AOC Technical Group participated in meetings and/or conference calls on

April 10th, May 14th, and June 12th to review the AOC progress. Additionally, the AOC Technical Group toured the HWC IU IRA sites on May 15th.

Hanover/Whitewater Creeks Investigation Unit

Groundhog Mine Area

As per the *Groundhog Mine Site Interim Remedial Action (IRA) Completion Report* and additional supplemental completion reports for the area, Chino continues to perform quarterly erosion monitoring of the sites and bi-annual water quality monitoring of the Groundhog site. The monitoring data are included in the Groundhog Mine Site annual monitoring reports submitted at the end of October for each year of monitoring.

The New Mexico Mining and Minerals Division (MMD) has approved extension requests by Chino under Permit GR009RE for the completion of reclamation activities at the Lucky Bill Groundhog Mine No. 5 site. Chino has requested to amend the Chino Mines Closure Closeout Plan Revision application submitted to MMD and the NMED on February 16, 2018, to address the reclamation schedule for regulated sites. Modification 14-1 to MMD Permit GR009RE, requires completion of the Groundhog No. 5 Stockpile reclamation by June 30, 2018. In an email dated June 11, 2018, Chino has requested to change the Groundhog No. 5 reclamation completion date from June 30, 2018 to Dec 31, 2024. This extension period is necessary for Chino to sequence the MMD reclamation process with the AOC. MMD has responded in an email dated November 5, 2018 that the requested change to the reclamation schedule will be implemented under Revision 18-1, which is an update to the Chino Closure/Closeout Plan which is still pending review and approval.

Additionally, in 2014 Chino installed a new seepage collection system under an NMED approved work plan which has been performing well to address inadequate seepage capture for sampling at the toe of the stockpile. Chino continues to collect samples from the engineered system. Chino submitted the interim report on the geochemical evaluation of the site under the *Revised Technical Memorandum for the Groundhog No. 5 Stockpile Geochemical Evaluation* on March 5, 2018 to NMED. A discussion to support NMED review of the TM occurred by conference call hosted by Chino on June 6, 2019. NMED provided comments on the TM in a letter dated June 13, 2019. Chino developed and submitted a *Groundwater Pathway Evaluation Addendum to the Revised TM* on July 17, 2019 to NMED in response to their comments. NMED anticipates providing comments on the *Addendum* during the third quarter of 2019.

2018-2019 Interim Removal Action

In June 2017, NMED and Chino agreed to focus on optimizing resources into performing an interim removal action (IRA) as opposed to utilizing effort into identifying any additional data gaps. A Human Health Risk Assessment would then be performed following the IRA to then evaluate remaining risk. Chino submitted an IRA Work Plan and NMED approved the document in a letter dated June 11, 2018.

The HWC IU IRA was implemented in October 2018 and was completed as projected on June 30, 2019 by Chino and its environmental remediation contractor team. NMED performed twice weekly inspections of the IRA site during its active period. Chino continues to provide updates on the project to NMED and EPA. Chino removed 118,900 cubic yards of impacted material from Whitewater Creek. Information for the excavated IRA material placement within the mine is being reported in quarterly and annual reports under Discharge Permit 526.

Media statements were announced through local radio stations and newspapers to inform the public about the increase in traffic in the vicinity of Whitewater Creek during the first quarter, 2019 through April 2019. Public communications were also supplemented with a Fact Sheet and Frequently Asked Questions flyer which was provided to each resident within a quarter mile of the Whitewater Creek project site during the third quarter 2018. These flyers are continually being provided to individuals who make enquiries concerning the removal action as well.

Hurley Soils Investigation Unit

Chino provided the annual health advisory by certified mail to the four Hurley property owners identified as requiring remediation, and the adjacent property owners, as required by the Record of Decision during the first quarter 2019.

In an on-going outreach program, Chino anticipates remediating up to two of the remaining four residential sites that requires cleanup during the third quarter of 2019 based on sampling results. Data results from the sampling program and remediation effort will be provided in a technical memorandum to NMED following the completion of the outreach program.

Lampbright Investigation Unit

The NMED provided the revised *LBIU Ecological Risk Assessment* (ERA) in 2018 to Chino and the public for review. NMED approved the ERA and provided responses to comments received from stakeholder reviews in a letter dated February 28, 2019. Additionally in a letter dated June 5, 2019, NMED requested as a follow up to their approval of the ERA, habitat and presence/absence surveys for the Chiricahua Leopard Frog (CLF) to address uncertainties identified in the ERA. Chino provided a response to NMED concerning the CLF survey request in a letter dated July 13, 2019 and plans to start surveys in September 2019.

Smelter Tailings Soil Investigation Unit

Interim Remedial Actions

As an extension of the 2008 STS IU Golf Course IRA and utilizing the 2006 IRA workplan, Chino implemented the B Ranch IRA on June 17, 2019 to address 20 acres adjacent to Hurley Operations boundary, as well as the Golf Course IRA site and the Hurley Soils IU IRA site. Chino utilized the contractor remediation team already in place for addressing the HWC IU IRA. NMED approved to extend the Golf Course IRA boundary into the B Ranch site in an email dated May 15, 2019. NMED additionally performs regular site visits to the B Ranch IRA. Chino continues to provide updates on the project to NMED and EPA. Chino anticipates completing this IRA extension by the end of July 2019.

As documented in the 2013 supplemental IRA completion report addressing the Hurley railroad area, Chino is conducting quarterly post-remediation erosion and vegetation monitoring. The quantitative vegetation survey for these 30 acres was performed in October 2017, with survey results provided to NMED in a cumulative survey report after five years of monitoring, dated September 10, 2018. NMED provided comments and conditional approval on the report in a letter dated May 1, 2019. Chino submitted a revised report and response to comments letter on May 22, 2019.

As documented in the *Razorback Ridge Area IRA STS IU Supplemental Completion Report* dated 2016, Chino is conducting quarterly post-remediation erosion and vegetation monitoring for those remediated sites.

Historical tailings material located in the Apache Tejo drainage was incorporated into the STS IU by NMED in 2009. NMED requested that Chino submit an IRA work plan for the Apache Tejo drainage system. Chino plans to submit a survey and characterization report during the fourth quarter of 2019.

Feasibility Study

The STS IU Pre-Feasibility Study Remedial Action Criteria (RAC) were established by NMED in letters dated September 16, 2010, and March 2, 2011. Current activities and processes initiated by the 2011 feasibility study (FS) work plan are as follows:

- Chino, with NMED participation, performed vegetation and soil surveys for additional reference sites for use in the Feasibility Study (FS) in early October 2018.
- Chino anticipates submitting the draft FS report in 2019, following incorporation of the *Phytotoxicity and Vegetation Community Study* report dated 2017 and its results.
- Additionally Chino is incorporating the five year monitoring reports for the amendment study and the white rain monitoring study, titled respectively, *Year 5 Monitoring Report for STS IU Amendment Study Plots* and the *Year 5 Report on pH Monitoring to Evaluate the Effect of the White Rain on the STS IU*, into the FS.
 - As part of the amendment study, Chino monitored the effects to soil pH following its *White Rain Technical Memorandum* report that documented changes in the pH of the soils plots caused by a natural event that occurred in January 2008.

Community Relations

The Community Work Group (CWG) participated in their annual AOC site visit by touring the on-going Whitewater Creek IRA on April 6, 2019, and met again on May 14, 2019. The three local Chino AOC document repositories continue to be maintained and updated with current documentation. The online electronic document repository (<http://www.fcx.com/chino/>) is also up to date.

Next Quarter's Scheduled Activities

The following work and activities are projected for the third quarter of 2019:

- Complete the construction phase of excavation and the reseeding of the 20 acres for the B Ranch Interim Removal Action (IRA) under STS IU.
- Prepare and implement a CLF survey for LIU.
- Submit an Addendum to the Groundhog No. 5 Stockpile Geochemical Evaluation under the HWC IU.
- Complete yard remediation in Hurley under the HSIU.
- Quarterly inspections of interim remediation sites with the HWC IU and STS IU.
- The CWG will meet on September 10, 2019.
- The AOC Technical Group will meet monthly.

Personnel Changes

There were no personnel changes during the quarter

Problems and Solutions

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There were no problems that adversely affected the AOC this quarter.

Please contact Ms. Pam Pinson at (575) 912-5213 with any questions or comments concerning this report.

Sincerely,

Sherry Burt-Kested, Manager
Environmental Services

SBK:pp
20190726-001

c: (via email):
David Mercer, NMED
Joseph Fox, NMED
Petra Sanchez, US EPA
DJ Ennis, MMD
Holland Shepherd, MMD
David Ohori, MMD
Shelly Lemon, NMED
Kurt Vollbrecht, NMED
Michael Steward, FCX
William Cobb, FCX

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Please contact Ms. Pam Pinson at (575) 912-5213 with any questions or comments concerning this report.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sherry Burt-Kested". The signature is fluid and cursive.

Sherry Burt-Kested, Manager
Environmental Services

SBK:pp
20190726-001

c: (via email):
David Mercer, NMED
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Kurt Vollbrecht, NMED
Michael Steward, FCX
William Cobb, FCX