

Freeport-McMoRan Chino Mines Company
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Certified Mail #70182290000160737498
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, Fourth Quarter 2019

This Administrative Order on Consent (AOC) Quarterly Report documents activities performed during the reporting period from October 1 through December 31, 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 fourth quarter of 2019, the following major activities occurred:

- NMED provided conditional approval of the Addendum to the Groundhog No. 5 Stockpile Geochemical Evaluation under the Hanover/Whitewater Creek Investigation Unit (HWC IU) to the NMED.
- Chino completed the reseeding of 5 acres utilized for the temporary staging of removed material supporting the HWC IU Interim Removal Action (IRA).
- Chino performed the 5 year quantitative vegetation survey for the Razorback Ridge IRA under Smelter/Tailing Soils Investigation Unit (STS IU).
- Chino performed quarterly post-remediation monitoring of the Interim Remedial Action sites under the STS IU and the HWC IU.
- The AOC Technical Group participated in meetings and conference calls on October 21st, November 14th, and December 12th to review the AOC progress.
- NMED performed a site visit on November 14th to the Groundhog Mine IRA site and the Groundhog Stockpile #5 IRA site as well.

Hanover/Whitewater Creeks Investigation Unit

IRAs in the Groundhog Mine Area

As per the *Groundhog Mine Site Interim Remedial Action (IRA) Completion Report* and additional supplemental completion reports for the Groundhog Mine area, Chino continues to perform quarterly erosion monitoring of the various IRA sites as well as bi-annual water quality monitoring. The monitoring data are included in the Groundhog Mine Site annual monitoring reports submitted at the end of October for each year of monitoring. NMED approved the 2019 annual report in a letter dated December 19, 2019.

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

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 Groundhog No. 5 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 (TM) for the Groundhog No. 5 Stockpile Geochemical Evaluation* in 2018 to NMED. 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 comments. NMED provided conditional approval supported by comments on the *Addendum* in a letter dated December 20, 2019. Chino has met one of the letter conditions by improving the drainage controls on the stockpile in early January. Chino anticipates submitting a cover placement plan in February 2020 to NMED and MMD to meet the approval letter requests.

2019 Whitewater Creek IRA

The HWC IU IRA for removing impacted material from Whitewater Creek was completed on June 30, 2019. Chino implemented a monitoring program for the completed Whitewater Creek IRA during the fourth quarter of 2019. Chino anticipates submitting the IRA completion report within the first quarter of 2020.

Hurley Soils Investigation Unit

Chino remediated one of the remaining four residential sites that requires cleanup during the third quarter of 2019 based on sampling results. Two additional residential sites recently sampled do not require remediation. Sampling and remediation results from an outreach program to these 6 sites will be provided to NMED in an addendum report to the 2014 Supplemental Completion Report during the first quarter of 2020.

Lampbright Investigation Unit

The NMED approved the revised 2018 *Lampbright IU (LIU) Ecological Risk Assessment (ERA)* and provided responses to comments received from stakeholder reviews in February 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 and NMED discussed the CLF survey request in a series of letters exchanged from July to August 2019.

- Chino submitted a *CLF Survey Workplan, Fall 2019* on September 16, 2019 to address risk uncertainty identified in the final LIU ERA.
- NMED approved the survey workplan via an email dated September 19, 2019.
- Chino and its biologist performed the formal survey for CLF habitat and presence/absence surveys in the vicinity of the LIU during the week of September 23rd with NMED participation.
- Chino anticipates submitting the CLF survey results report in first quarter of 2020.

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 in June 2019 to address 22 acres adjacent to Hurley Operations boundary, as well as the Golf Course IRA site and the Hurley Soils IU IRA site. Chino completed this IRA extension by the end of July 2019 with the removal of 16,000 cubic yards of impacted soil and revegetation at the B Ranch site. Chino anticipates submitting the B Ranch IRA completion report within the 1st quarter of 2019.

As per the 2013 supplemental IRA completion report addressing the Hurley railroad area, Chino conducted quarterly post-remediation erosion and vegetation monitoring. The 2017 quantitative vegetation survey results for these 30 acres, following five years of monitoring, was provided to NMED in a cumulative report, in 2018. NMED provided comments and conditional approval on the report in a letter dated May 1, 2019. Chino submitted a revised report and responses 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. Following five years of this monitoring, a quantitative vegetation survey was performed in early October 2019, with pending survey results to be provided to NMED in the first quarter of 2020.

Historical tailings material located in the Apache Tejo drainage was incorporated into the STS IU by NMED in 2009. NMED requested that Chino submit a characterization report and an IRA work plan for the Apache Tejo drainage system. Chino plans to submit a survey and characterization report during the first quarter of 2020.

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 2020, following incorporation of the 2017 *Phytotoxicity and Vegetation Community Study* report and 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.

Community Relations

The Community Work Group (CWG) voted to meet again on January 14, 2020. 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 first quarter of 2020:

- Implement the monitoring program as needed for the completed Whitewater Creek IRA sites.
- Submit the results from the formal CLF survey for LIU.
- Submit a report for the 5 year quantitative vegetation survey for the Razorback Ridge IRA under STS IU.

- Submit the HSIU addendum completion report.
- Submit the B Ranch Interim IRA completion report under STS IU.
- Submit the HWC IU IRA completion report.
- Conduct quarterly inspections of interim remediation sites within the HWC IU and STS IU.
- The CWG scheduled their next meeting for January 14, 2020.
- The AOC Technical Group scheduled a tour of the 2019 IRAs for January 14, 2020.
- The AOC Technical Group will meet monthly.

Personnel Changes

There were no personnel changes during the quarter

Problems and Solutions

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
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- c: (via email):
David Mercer, NMED
Joseph Fox, NMED
Petra Sanchez, US EPA
DJ Ennis, MMD
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