

Freeport-McMoRan Chino Mines Company
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Certified Mail #70182290000117902870
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, Third Quarter 2019

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

- Chino submitted an Addendum to the Groundhog No. 5 Stockpile Geochemical Evaluation under the Hanover/Whitewater Creek Investigation Unit (HWC IU) to the NMED.
- Chino completed excavating and reseeding the total 20 acres for the B Ranch Interim Remedial Action (IRA) under Smelter/Tailing Soils Investigation Unit (STS IU).
- Chino completed yard remediation and re-landscaping in Hurley under the Hurley Soils Investigation Unit (HSIU).
- Chino submitted the *Chiricahua Leopard Frog (CLF) Survey Workplan, Fall 2019* under the Lampbright Investigation Unit (LIU) to the NMED.
- Chino implemented the CLF survey to address uncertainties identified in the *Ecological Risk Assessment* for the LIU.
- Chino performed quarterly post-remediation monitoring of the Interim Remedial Action sites under the STS IU and the HWC IU.
- The CWG met on September 10, 2019.
- The AOC Technical Group participated in meetings and conference calls on July 24th, August 21st, and September 10th to review the AOC progress.

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.

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 anticipates providing comments on the *Addendum* during the fourth quarter of 2019.

2019 Whitewater Creek IRA

In 2017, NMED and Chino agreed to focus on optimizing resources into performing an interim removal action (IRA) and to follow up with an evaluation of remaining risk under a residual risk assessment, as opposed to utilizing effort into identifying any additional data gaps. The HWC IU IRA was completed on June 30, 2019 resulting in 118,900 cubic yards of impacted material being removed from Whitewater Creek by Chino and its environmental remediation contractor team. Chino documented the placement of the excavated IRA material within the mine under Discharge Permit 526 reporting.

Chino will initiate a monitoring program for the completed Whitewater Creek IRA. Chino anticipates submitting the IRA completion report at the end of the 4th quarter of 2019.

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. Sampling and remediation results from an outreach program to these 4 sites will be provided to NMED in an addendum report to the 2014 Supplemental Completion Report.

Lampbright Investigation Unit

The NMED provided the revised *LBIU Ecological Risk Assessment (ERA)* to Chino and the public for review in 2018. NMED approved the 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 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.
- NMED responded to Chino's comments concerning a CLF survey in a letter dated August 14, 2019.

- Chino provided additional responses to both of the previous survey request letters from NMED on August 29, 2019 and submitted a *CLF Survey Workplan, Fall 2019* on September 16, 2019 to address risk uncertainty identified in the final LIU ERA.
- NMED approved the 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.

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. Chino completed this IRA extension by removing 13,000 cubic yards of impacted soil and revegetating from the B Ranch site by the end of July 2019. Chino anticipates submitting the B Ranch IRA completion report by the end of the 4th quarter of 2019.

As documented in the 2013 supplemental IRA completion report addressing the Hurley railroad area, Chino conducted 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 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 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 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) met again on September 10, 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 fourth quarter of 2019:

- Initiate a monitoring program for the completed Whitewater Creek IRA sites.
- Perform the 5 year quantitative vegetation survey for the Razorback Ridge IRA under STS IU.
- Submit the HWC IU IRA completion report.
- Submit the B Ranch Interim IRA completion report under STS IU.
- Submit the HSIU addendum completion report.
- Submit the results from the formal CLF survey for LIU.
- Conduct quarterly inspections of interim remediation sites within the HWC IU and STS IU.
- The CWG will meet on January 12, 2019.
- 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
Holland Shepherd, MMD
David Otori, MMD
Shelly Lemon, NMED
Kurt Vollbrecht, NMED
Michael Steward, FCX
William Cobb, FCX