



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov



RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 6, 2015

Ms. Sherry Burt-Kested, Manager
Environment Services
Freeport-McMoRan Chino Mines Company
P.O. Box 10
Bayard, New Mexico 88023

RE: Response to Chino's comment letter dated June 18, 2015 regarding the Hanover and Whitewater Creeks Investigation Unit Ecological Risk Assessment Report, Chino - Administrative Order on Consent.

Dear Ms. Burt-Kested:

The Ground Water Quality Bureau of the New Mexico Environment Department (NMED) received the above referenced comment letter on June 18, 2015. NMED completed a review of the comments and has compiled responses which are listed below.

This letter contains responses to the General Comments, Risk Analysis of Vegetation, Risk Analysis of Terrestrial Wildlife, Risk Analysis of Aquatic Receptors, and associated Figures. In addition to the specific issues raised by Chino, some other minor changes to the Ecological Risk Assessment (ERA) report have been made for consistency. For this final revision of the ERA, the parties have agreed to provide responses in a redline/strikeout format to facilitate a quicker revision of the ERA. These responses and any further dialog on the ERA are limited to Chino's June 18, 2015 comments.

I will send you an email and a file transfer link with the redline/strikeout edits of the ERA that addresses your most recent comments. NMED requests any specific comments to the revised sections be submitted by close of business on October 20, 2015.

If you have any questions, please contact me at (575) 956-1550.

Sincerely,

David Mercer, Chino AOC Project Manager
Mining Environmental Compliance Section
Ground Water Quality Bureau
New Mexico Environment Department
Silver City Field Office

DWM: dwm

Enc: Electronic version of Redline Revised Document and Figures (via email link)

cc: Petra Sanchez, Remedial Program Manager, USEPA (via email)
Kurt Vollbrecht, Program Manager, MECS (via email)
Joe Fox, AOC Team Leader, MECS (via email)
Mark Lewis, Formation Environmental (via email)
Joe Allen, Formation Environmental (via email)
Ned Hall, Freeport-McMoRan Inc. (via email)
Pam Pinson, Freeport-McMoRan Chino Mines Company (via email)

**New Mexico Environment Department's Responses to the Chino Mine Company's
Comment Letter on the draft Final Ecological Risk Assessment for the
Hanover/Whitewater Creek Investigation Unit**

This document presents the New Mexico Environment Department's (NMED's) follow-up responses to Freeport-McMoRan Chino Mines Company's (Chino's) Response to Comment letter dated June 18, 2015 concerning the draft Ecological Risk Assessment for the Hanover/Whitewater Creek Investigation Unit (HWCIU). This document is organized to present a response to comments from Chino. Responses by NMED are in bold italics, preceded by a brief summary of Chino's comments from June 18, 2015.

This document is divided into six sections: General Comments, Risk Analysis of Vegetation, Risk Analysis of Terrestrial Wildlife, Risk Analysis of Aquatic Receptors, and Figures. Best efforts have been made to respond to the comments in the order that they were presented.

1) General Comments: Introduction and Purpose: The comment indicates that additional discussion regarding the White Rain event should be added to Section 1.

Response: The results of the 'White Rain' study are being compiled in its own report and NMED believes the event has been presented in adequate detail in the ERA report. However, the following text has been added to Section 1.1.2.

In January 2008, a 'white rain' event occurred at the Site. Precipitation containing a white milky substance, later identified as calcium carbonate, fell randomly with varying degrees of distribution over the entire Chino Mine Site, including H/WCIU and resulted in increased pH in soils within both the S/TSIU and H/WCIU (CMC 2010). The long-term permanence of the white rain is unknown and is currently being studied. No agreements to any potential conclusions of the 'white rain' study have been completed at the time of this report. The potential effects of this event are discussed in more detail in the pertinent sections of this document.

2) Risk Analysis of Vegetation: The comment discusses the interim remedial actions that were conducted at the former Groundhog Mine and requests that the data are added to the risk assessment.

Response: The data have been included in the revised version of the risks assessment. Data from location ERA-32 have been replaced in the assessment by the 95% upper confidence limit of the mean (95UCL) of the post-remediation confirmation samples. These changes were made throughout the document where data from ERA-32 were used in the previous draft document.

3) Risk Analysis of Terrestrial Wildlife: There are several comments provided and each is addressed as follows.

3a) Use of the USEPA's Ecological Soil Screening Levels (EcoSSLs). The comment requests the addition of clarifying text to clarify the context in which the EcoSSLs have been added to the report.

Response: A brief discussion of the EcoSSLs has been added to Section 3.0 as requested.

3b) The comment requests additional discussion of background soil concentrations where appropriate in Section 3 of the report.

Response: Section 3 of the revised assessment was modified slightly to clarify when influences from upstream of the site were referenced that those references were indicative of background conditions not related to the Site. Further discussion of what constitutes background risk and addressing background risks should be conducted as part of the Feasibility Study.

3c) The comment requests additional discussion of the 95UCL concentrations in the risk discussions for cadmium, lead, and zinc.

Response: Additional discussion of the 95UCL concentrations has been added to the text as requested.

4) Risk Analysis of Aquatic Receptors: There are several comments provided and each is addressed as follows.

4a) The comment requests the discussion of the uncertainties related to the potential differences between the water used for toxicity testing in Chiricahua leopard frogs (CLF) and the water present at the Site.

Response: As requested in previous comments, NMED adjusted the toxicity values derived for the CLF using site-specific hardness. No additional adjustments to the values were needed, however, a brief statement further highlighting the uncertainty in the CLF toxicity values was added to Section 4.1.

4b) The comment requests that the document be modified to indicate that the CLF has not been documented in the H/WCIU.

Response: The text has been modified to indicate that to date, the CLF has not been documented in surveys conduction in the H/WCIU.

4c through 4f) This series of comments request clarification and correction of issues related to the recalculation of water quality criteria using data from species typically found in arid west water bodies. The comments also provide 4 specific comments related to the recalculation appendix.

Response: As requested, Appendix D has been extensively modified to provide additional information needed to clarify the calculations provided in Table 4.1-1. In addition, Table 4.1-1 has been reviewed and modified as needed to accurately reflect the calculations provided in Appendix D. Finally, as requested, chronic water quality benchmarks were calculated using the same procedures as for acute benchmarks and have been added to Table 4.1-1 and are discussed briefly in the text.

5) Four comments related to the figures were provided and were addressed as follows.

5a) The comment requests that updated aerial imagery should be used in the revised report.

Response: As requested, all of the pertinent figures have been updated using the images provided by Chino.

5b) The comment requests the polygon used in Figures 1.0-1 and 1.1-1 leave out part of lower Whitewater Creek and may incorporate too much upland area into the polygon.

Response: As requested, the polygons shown in Figures 1.0-1 and 1.1-1 have been modified to more accurately show the approximate extent of the H/WCIU in the southern portions of the Site.

5c) The comment requests that the figures showing Whitewater Creek in the operations area requires updating to provide accurate information.

Response: As requested, all of the pertinent figures have been updated using the updated flow path of Whitewater Creek provided by Chino.

5d) The comment indicates that sampling location ERA-31 is not within the H/WCIU.

Response: The comment is correct and the figures, data, and assessment have been updated to remove ERA-31 from the dataset.

