

20170623-004



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June 13, 2017

Ms. Sherry Burt-Kested, Manager
Environment Services
Freeport-McMoRan Chino Mines Company
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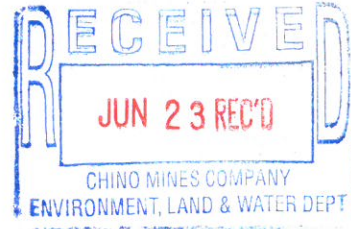
NEW MEXICO
ENVIRONMENT DEPARTMENT

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BUTCH TONGATE
Cabinet Secretary

J.C. BORREGO
Deputy Secretary



RE: Request for Response to Additional Comments, Vegetation Monitoring Report, Groundhog Mine Site and Small Historic Stockpile Sites Interim Remedial Action, dated September 30, 2016, 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 report dated September 30, 2016. The report has been reviewed by NMED and the general public during the 30-day public comment period, which ended on February 17, 2017. Please revise the report in response to the following questions and comments within thirty (30) days of receiving this letter per timeframes designated in the AOC. NMED will then review the revised report in consideration of approval.

Questions and Comments:

- 1) A number of NMED's comments from draft document review August 9, 2016 on the Groundhog Mine Site Vegetation Monitoring Report requested clarifications on the statistics discussed in the report. These included Specific Comments #2, 3, 5, and 6. While some additional text was added to the report as indicated in the response to comments (September 12, 2016), the additions do not fully address the concerns raised in the comments. As written, it is not possible to verify the statements made in the report because insufficient information about the statistics used to make the statements is provided.

Statements such as 'there is a 90% probability that the true mean is within 10% of the sample mean' require more information to verify. It is our assumption that those statistics were derived by solving the sample adequacy equation provided in Section 2.4 for the t value in the equation. The probability (alpha) is then reported based on the probability provided by the Student's T distribution at that t value and based on the

degrees of freedom in the data. Such an approach would be appropriate, but since that level of detail is not provided in the revised version of the text, it cannot be confirmed. Please verify that our assumption of the statistics is accurate and add the necessary information to the document to allow the readers to verify the statistics provided.

- 2) In Section 1.1 – Background, the growth medium is described as “A 6 to 12-inch thick layer from a local borrow source”. Please describe the location of the borrow source and the composition of the growth medium. Was this source amended with manure or other organic material? If the growth medium was amended, would this account for the higher densities in shrubs on the remediated site?
- 3) In Section 4.2 – Shrub Density, it is reported that the remediated sites have substantially higher shrub densities compared to the reference area. Please discuss why the remediated site might have a higher density of shrubs. Were there shrubs included in the seed mix used in hydro-seeding? Would the growth medium be a factor that contributed to higher densities of shrubs in the remediated site?
- 4) In Section 4.3 – Plant Diversity, the report states “The viability of achieving the cool season grass requirement on the reclamation in this region is becoming increasingly unlikely based on this and other studies (i.e. Chino Test Plot cover suitability demonstration, Tyrone vegetation monitoring) conducted over the past several years”. Please discuss why the cool season grasses are unlikely to be present? Please describe the Chino Test Plot sites where these grasses are not returning. Could changes in temperature averages affect the return of cool season grasses?
- 5) In Section 5.0 – Closing, the report states “all of these sites are intersected by mine infrastructure and are not isolated from mining activities”. Please describe how infrastructure impacts the growth of vegetation and the impact of mining activities on this area. What is the duration of monitoring anticipated for this area?

Please submit a revised report to the NMED within thirty days (30) of receiving this letter. 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

cc: Petra Sanchez, USEPA (via email)
Michelle Hunter, NMED (via email)
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