

March 30, 2004

Ms. Susan Crowley  
Kerr-McGee Chemical LLC  
PO Box 55  
Henderson, Nevada 89009

Re: **Kerr-McGee Chemical Corporation LLC (KM)**  
**NDEP Facility ID #H-000539**  
Nevada Division of Environmental Protection Response to:  
*Semi-Annual Performance Report*  
*Chromium Mitigation Program*  
*July – December 2003*

Dear Ms. Crowley,

The Nevada Division of Environmental Protection (NDEP) has reviewed the above-referenced report. NDEP's comments to the report are included as Attachment A to this letter.

The NDEP has additional comments regarding the chromium mitigation system which were presented in NDEP's February 11, 2004 letter to KM. In general, these comments will not be repeated here.

By **May 7, 2004** KM should provide a response to the NDEP's concerns. Should you have any questions or concerns, please do not hesitate to contact me at (702) 486-2870.

Sincerely,

Brian A. Rakvica, P.E.  
Staff Engineer III  
Remediation and LUST Branch  
Bureau of Corrective Actions  
NDEP – Las Vegas Office

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Encl: Attachment A

CC: Jim Najima, NDEP, BCA, Carson City  
Jon Palm, NDEP, BWPC, Carson City  
Todd Croft, NDEP, BCA, Las Vegas  
Jennifer Carr, NDEP, BCA, Carson City  
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Carrie Stowers, Clark County Comprehensive Planning, PO Box 551741, Las Vegas, NV, 89155-  
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Ranajit Sahu, BEC, 875 West Warm Springs Road, Henderson, Nevada 89015  
Craig Wilkinson, TIMET, PO Box 2128, Henderson, Nevada, 89009-7003  
Kirk Stowers, Broadbent & Associates, 8 West Pacific Avenue, Henderson, Nevada 89015

## Attachment A

### NDEP Comments on the *Semi-Annual Performance Report; Chromium Mitigation Program; July – December 2003*

1. Plant Site Chromium Capture
  - a. The NDEP requests that KM complete a quantitative evaluation of the efficiency of the capture system on the plant site area at a concentration of 0.1 mg/L total chromium. Unrelated to the Chromium Consent Agreement, it is also requested that a quantitative evaluation of the efficiency of this capture system be completed for perchlorate at 1 mg/L. These evaluations should be similar in scope to the evaluation presented in the January 28, 2004 Quarterly Performance Report for the Perchlorate Recovery System submittal by KM for the Athens Road well field area.
  - b. Figures 2 and 3 appear to indicate incomplete capture in the on-site capture system. This is especially noticeable in the eastern portion of the system, east of well I-U.
  - c. Tables 1 and 3 indicate elevated levels of chromium in downgradient wells M-23, M-72, M-84, M-86 and M-88 (as high as 11.0 mg/L). Plate 1 generated in July 2003 also indicates elevated levels of chromium in a number of additional wells such as: M-44, M-48, M-87, M-94, M-95, M-96, M-100, M-101, M-102 and PC-54. The current remedial system has been in place for nearly 20 years and concentrations downgradient of the plant site are still over 100 times higher than the USEPA MCL. Please explain KM's long-term plans to control and remediate the chromium source areas upgradient of the plant site slurry wall and elevated concentrations downgradient of this slurry wall.
  - d. The on-site chromium treatment system was originally designed for an operational flow of 100 gallons per minute (gpm). Flow rates to this system have typically been much less than 100 gpm. It appears that the system may be mass limited based on the information provided by Andco Environmental Processes. Please explain the limitations of this system and describe any plans that KM has to expand or replace this system in the future.
2. Off-site Chromium Capture
  - a. Please include a description of the activities for the remediation of chromium at the Athens Road well field in future reports. It is the opinion of NDEP that this work should be included in the reporting as it relates to Appendix E (GW Interception Contingency Plan) of the September 9, 1986 Chromium Mitigation Consent Agreement.
  - b. Elevated levels of chromium have been reported to the east of the on-site capture system in well CLD4-R by Titanium Metals Corporation (TIMET). The NDEP has requested that TIMET investigate the source of this elevated concentration of chromium and this investigation is on going. For your information, TIMET has indicated that only trivalent chromium is produced as a waste on their site.

3. Source Areas
  - a. Please provide an update describing the current and future uses of Units 4 and 5 on the plant site. Please explain if KM anticipates reactivation of any of the chlorate production processes.
  - b. Please summarize the historic and continuing source areas to the chromium groundwater plume.
  - c. The NDEP requests that KM investigate the feasibility of source area removal. For example, old Ponds P-2 and P-3 have concentrations of chromium in soil (greater than 100 mg/Kg) in excess of USEPA Region IX Soil Screening Levels (SSLs DAF1). Some of these elevated concentrations were taken at over 40' below ground surface (bgs). It is expected that these areas are impacting site groundwater.