

November 5, 2003

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

RE: First Half 2003 Performance Report – Chromium Mitigation Program
Kerr-McGee Chemical LLC
NDEP Facility ID # H-000539

Dear Ms. Crowley:

Prior to the next submission of the *Performance Report – Chromium Mitigation Program* please respond to the comments in Attachment 1. A written response is expected by December 12, 2003.

Please contact me if there are any questions or comments.

Sincerely,

Brian A. Rakvica, P.E.
Staff Engineer III
Bureau of Corrective Actions
NDEP-Las Vegas Office

cc: Jim Najima, BCA, NDEP, Carson City
Jon Palm, BWPC, NDEP, Carson City
Todd Croft, BCA, NDEP, Las Vegas.
Jennifer Carr, BCA, NDEP, Carson City
Valerie King, BWPC, NDEP, Carson City
Alan Tinney, BWPC, NDEP, Carson City
Jeff Johnson, BCA, NDEP, Carson City

Attachment 1

1. Laboratory Analytical Data.
 - a. All laboratory analytical data must be submitted.
 - b. Any issues with matrix interference or data quality must be clearly documented and justified. A plan to address any data quality issues should be included.
 - c. Kerr-McGee is also directed to my letter dated October 20, 2003 regarding discrepancies between the total and hexavalent chromium concentrations as presented in the quarterly report for the UIC permit.
2. Submission of Documents.
 - a. The case officer for this project is Brian Rakvica in the Las Vegas office of the NDEP. Please submit two copies of all future reports to my attention. Also, two copies of all future submissions shall be submitted to Jeff Johnson in the Carson City office of the NDEP.
3. It is requested that a comprehensive plume map be developed for chromium.
 - a. This map should include chromium iso-concentration contours down to a minimum of 0.01 mg/liter and should delineate the full depth and breadth of the plume.
 - b. All wells sampled for the development of the perchlorate plume maps should be considered for development of this plume map. If additional wells need to be installed, a work plan should be included.
 - c. In the future, it would be helpful to sample for chromium concurrent with perchlorate sample collection.
 - d. The plume map shall be of the same orientation and scale as the perchlorate plume map.
4. The additional remedial system installed to address the hexavalent chromium collected at the Athens Road well field should be described fully in the next submission.
 - a. The long-term effectiveness of this system should be evaluated. Kerr-McGee needs to evaluate the effectiveness of this remedial alternative as concentrations increase in the Athens Road well field.
 - b. As the plume of chromium continues to be drawn towards the Athens Road well field, it is reasonable to expect that the concentrations of total chromium and hexavalent chromium will continue to increase. Plate 1 in the aforementioned report clearly shows a plume migrating towards the Athens Road well field that contains total chromium concentrations in excess of 10 mg/liter.
5. The water contained in pond GW-11 is expected to be passed through the new fluidized bed reactor in the future. This water contains chromium and has been evapo-concentrating for years. It is requested that Kerr-McGee provide all available data on the concentrations of total and hexavalent chromium in this water. It is also requested that Kerr-McGee provide a detailed explanation of how it is planned to treat this water prior to discharge.
6. Kerr-McGee is planning on transmitting large volumes of water through the new fluidized bed reactor. Some of this water will not have passed through the existing chromium mitigation system. It is requested that Kerr-McGee provide a detailed explanation of how it is planned to treat this water prior to discharge.

7. It is requested that Kerr-McGee provide analytical data for the influent and effluent of the existing chromium mitigation system.

It is requested that Kerr-McGee evaluate the effectiveness of the existing chromium mitigation system. This system is over 15 years old and was not designed to meet the current requirements of Kerr-McGee's NPDES permit. Please explain what the long-term plan is for the remediation of chromium.