

May 6, 2005

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:  
*Use of Ferrous Sulfate for Reduction of Hexa-Valent Chromium* dated April 6,  
2005

Dear Ms. Crowley,

The NDEP has received and reviewed KM's correspondence identified above and provides comments in Attachment A. The NDEP requests that KM address the issues outlined herein no later than **June 22, 2005**.

If there is anything further or if there are any questions please do not hesitate to contact me.

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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CC: Jim Najima, NDEP, BCA, Carson City  
Jennifer Carr, NDEP, BCA, Carson City  
Todd Croft, NDEP, BCA, Las Vegas  
Nadir Sous, NDEP, BWPC, Las Vegas  
Jeff Johnson, NDEP, BCA, Carson City  
Barry Conaty, Akin, Gump, Strauss, Hauer & Feld, L.L.P., 1333 New Hampshire Avenue, N.W.,  
Washington, D.C. 20036  
Brenda Pohlmann, City of Henderson, 240 Water Street, Suite 210, Henderson, NV 89015  
Mitch Kaplan, U.S. Environmental Protection Agency, Region 9, mail code: WST-5,  
75 Hawthorne Street, San Francisco, CA 94105-3901  
Carrie Stowers, Clark County Comprehensive Planning, PO Box 551741, Las Vegas, NV, 89155-  
1741  
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  
Mr. George Crouse, Syngenta Crop Protection, Inc., 410 Swing Road, Greensboro, NC 27409  
Mr. Lee Erickson, Stauffer Management Company, 1800 Concord Pike, Hanby 1, Wilmington,  
DE 19850-5437  
Mr. Chris Sylvia, Pioneer Americas LLC, 8000 Lake Mead Parkway, Henderson, Nevada 89015  
Mr. Paul Sundberg, Montrose Chemical Corporation, 3846 Estate Drive, Stockton, California  
95209  
Joe Kelly, Montrose Chemical Corporation of CA, 600 Ericksen Avenue NE, Suite 380,  
Bainbridge Island, WA 98110

## ATTACHMENT A

1. It is not clear why this document was submitted to the NDEP Bureau of Water Pollution Control (BWPC) instead of the case officer from the Bureau of Corrective Actions (BCA) (Brian Rakvica). This is an issue that has been part of the discussion between KM and NDEP-BCA for some time and relates to the 1986 Consent Order between KM and NDEP-BCA. Please be advised that the comments contained herein are reflective of the comments from NDEP-BCA and additional comments may be provided by NDEP-BWPC.
2. Cover letter, KM states "GWTP treatment of about 20 gpm of water from the GW-11 pond...has allowed the Fluidized Bed Reactors (FBRs) to operate near their design capacity". It appears that KM is referring to the chemical capacity (versus hydraulic capacity) of the reactors in this statement and this item should be clarified.
3. Veolia Water memorandum, page 1, the subject of this memorandum is "Groundwater Treatment Plant – Test of Augmenting Electrolytic Chromium Reduction with Ferrous Sulfate Solution", however, the cover letter is requesting replacement of the electrolytic process not augmentation. Ideally, KM should have conducted testing that demonstrated the operation of a system that only used the ferrous sulfate solution. It does not appear that any testing was completed with the electrolytic cells turned off.
4. Veolia Water memorandum, page 2, KM states "effluent concentrations of hexavalent chromium have been near the 0.01 mg/L GWTP limit for direct discharge". This statement should be supplemented with a discussion on the effluent concentrations of total and hexavalent chromium from the FBR discharge (at the location where compliance samples are taken).
5. Veolia Water memorandum, page 2, KM states "the small quantity of sulfate contained in the ferrous sulfate solution does not appreciable alter the GWTP effluent sulfate concentration." This statement should be validated with applicable analytical data.
6. Veolia Water memorandum, page 2, please provide additional discussion on the methods that are used to control the addition of ferrous sulfate. Also, please discuss the frequency at which this system is monitored for influent and effluent hexavalent chromium concentrations.
7. Attachment B, this table is nearly illegible. It is requested that this table be reprinted and provided at a legible scale. Simply orienting the table in "landscape" fashion instead of "portrait" may have allowed KM to print this table in a legible fashion.
8. Attachment B, while KM has stated that the "effluent concentrations of hexavalent chromium have been near the 0.01 mg/L GWTP limit for direct discharge", this table shows that effluent concentrations have been as high as 10 times greater than the 0.01 mg/L limit described above. KM should provided discussions in the text that are representative of data collected.
9. Attachment C, while KM has stated that the "effluent concentrations of hexavalent chromium have been near the 0.01 mg/L GWTP limit for direct discharge" it is apparent in this table that weekly composite samples and monthly composite samples are regularly above the 0.01 mg/L limit described above. KM should provided discussions in the text that are representative of data collected. In

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addition, some weekly and monthly composites are listed as 0.000 ppm. This should be clarified.

10. Attachment D, this figure is in black and white and the legibility of the copy is limited. Please provide a legible color copy of this figure.