

July 28, 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:  
*Background Study Workplan – Groundwater and Soils – Kerr-McGee Response  
to NDEP May 6, 2005 Comments dated July 20, 2005*

Dear Ms. Crowley,

The NDEP has received and reviewed KM's correspondence identified above and provides comments in Attachment A. Please address these comments in the revised workplan, if there are questions it is suggested that these issue be discussed in our next monthly meeting.

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

Ms. Susan Crowley

5/17/2013

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CC: Jim Najima, NDEP, BCA, Carson City  
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, PO Box 95050, Henderson, NV 89009  
Mitch Kaplan, U.S. Environmental Protection Agency, Region 9, mail code: WST-5,  
75 Hawthorne Street, San Francisco, CA 94105-3901  
Rob Mrowka, Clark County Comprehensive Planning, PO Box 551741, Las Vegas, NV, 89155-  
1741  
Ranjit 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, PO Box 86, Henderson, Nevada 89009  
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. General comment, in a number of instances KM notes that the response is provided in the revised workplan. The NDEP will review the appropriateness of these revisions once the revised workplan is received.
2. Response #2, the NDEP has the following comments:
  - a. The NDEP recommends the use of the following statistical tests: Gehan Modification of the Wilcoxon Rank Sum Test; Quantile Test; Slippage Test; and side-by-side plots. The NDEP can provide additional information on these tests and a reference to a website that may assist Kerr-McGee with completing these tests. The derivation of background is an issue that requires rigorous analysis by KM and concurrence by the NDEP.
  - b. KM should reference the applicable USEPA guidance on the calculation of the range of background concentrations. Geochemistry textbooks are not an appropriate reference. Please review the applicable USEPA guidance and the KM response.
  - c. The NDEP understands and appreciates the importance of establishing upgradient conditions and requests that the terminology of upgradient be used in place of “local background”.
  - d. KM should note that the range of background concentrations will not necessarily be centered around the median.
3. Response #3, KM should note that the BRC/TIMET evaluation of background includes the evaluation of alluvial soils derived from the River Mountains and McCullough range. This evaluation will also determine if the soils from these two ranges are geologically and chemically similar. KM is located on soils derived from the McCullough Range. Please describe what “different geologic unit” is being referenced by KM in their response. It appears that KM may be referring to soils derived from the Muddy Creek Formation. Please clarify.
4. Response #8, KM should note that the nature and extent of contamination associated with the southern drainage ditch has not been determined and that it is likely that this ditch is a source of perchlorate, TPH, and other contaminants.
5. Response #14a, depending on the methodology used, the drawdown discussed by KM may not be appropriate. If low-flow sampling is performed the drawdown should be limited to less than 0.3 feet at the maximum purge rate. Additionally, it is recommended (for low-flow sampling) that the well equilibration be verified. The well should be opened and a depth to water measurement should be taken. This depth to water measurement should be taken periodically until two consecutive readings within 0.01 feet of each other are recorded. It is recommended that KM discuss the appropriate sampling techniques with a qualified vendor or TIMET personnel.
6. Response #14b, please note that the historical data is not based upon low-flow sampling. Low-flow sampling may allow KM to achieve the less than 3% variance that is requested. The remaining parameters should stabilize prior to sampling of the well. Once KM has selected a sampling method, NDEP will work with KM to determine an appropriate operating procedure. Also, please note that the revised

workplan cannot be approved until a sampling procedure is decided upon and discussed with the NDEP.

7. Response #16, please see NDEP comment above regarding Response #2.
8. Response #20a, KM should note that it is likely that the drainage ditch along the southern property boundary is a likely source of contamination. See also comment #3 above. KM should note that it is possible that the proposed wells may serve as a good indication of upgradient conditions but may not be appropriate for the evaluation of background conditions. As NDEP has discussed with KM previously, it is preferable to locate background locations off-site and upgradient of impacts from the site.
9. Response #24d, it is expected that the revised workplan will provide a discussion on how the VOCs in this list were selected and how they compare to the site-related chemical list.