



KERR-McGEE CHEMICAL LLC

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ENVIRONMENTAL PROTECTION
LAS VEGAS OFFICE

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2005 SEP 30 P 4: 32

September 30, 2005

Mr. Brian Rakvica, P.E.
Nevada Division of Environmental Protection
1771 East Flamingo, Suite 121-A
Las Vegas, NV 89119-0837

Subject: NDEP Facility ID H-000539 – Kerr-McGee ECA – *Source Area Evaluation Work Plan
Conceptual Approach*

Dear Mr. Rakvica:

Kerr-McGee Chemical LLC (Kerr-McGee) has undertaken an Environmental Conditions Assessment (ECA) as directed by Nevada Division of Environmental Protection (NDEP). An element of this ECA is the development of a *Conceptual Site Model*, CSM, for the facility. Preparation of this document has illuminated data gaps and while the CSM is not yet complete and approved by NDEP, Kerr-McGee has discussed with NDEP a conceptual approach for filling these data gaps. The attachment summarizes that approach.

Feel free to call me at (702) 651-2234 if you have any questions regarding this correspondence. Thank you.

Sincerely,

Susan Crowley
Staff Environmental Specialist, CEM 1428

Hand Carried

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Attachment

**Kerr-McGee Henderson Source Area
Workplan Conceptual Approach
September 30, 2005**

As requested by NDEP characterization of the site will be approached as a whole rather than as separate, individual LOU areas. There will, however, be some issues that are LOU specific and these will be addressed individually as needed. A phased approach is planned and to avoid confusion with the previous Phase I and II investigations that have been completed; Phase A, B and C terminology has been used.

Phase A: Initial Assessment of Site Related Chemicals in Soil and Groundwater

The objective of Phase A is to determine how many of the site-related chemicals (SRCs) are actually present on-site and to start the screening process to select SRCs applicable to future sampling efforts and to support the selection of chemicals of potential concern (COPCs).

Soil borings (approximately 10) will be drilled to the water table (about 25 to 45 feet below ground surface). Three, discrete soil samples per boring will be collected; at the surface, 10 feet and at approximately 30 feet below ground surface (specifically just above the water table). These samples will be analyzed to assess the presence or absence of the full suite of SRCs. Locations will be selected to represent areas with the greatest potential for impact as well as a few areas expected to have no or low levels of impact. The purpose of sampling areas of low or no expected impact is to achieve low detection levels of the SRCs (and evaluate any matrix effects) and to document if the area does or does not exhibit soil impacts. In addition, a set existing groundwater wells (or groups of wells) will be identified to be sampled for the entire suite of SRC. Again, these will be sited to review areas of greatest potential impact.

Phase B: Develop a series of East-West chemical cross sections to define general site-wide vadose zone impacts and to refine the COPC list

The objective of Phase B is to continue to develop the data needed to support the selection of the COPCs and to compile a generalized site-wide chemical profile of the vadose zone. We will add to the data collected in Phase A by drilling additional boreholes along four east-west traverses that extend across the width of the KM property. For example, the cross section lines could be:

- 1) Immediately south of Avenue G
- 2) Through the P-2 Ponds area
- 3) Immediately south of Beta Ditch
- 4) Immediately north of WC-1 and GW-11

This sampling effort will be limited to the SRCs that were recognized as significant during the Phase A screening. It will develop additional data to support the selection of COPCs, support area evaluations and identify which source areas need additional investigation under Phase C.

Phase C: Define individual source areas, collect samples as needed to fill data gaps regarding nature and extent of specific chemical impacts

The objective of Phase C is to focus the sample collection efforts on suspected source areas identified during Phase A and B and to refine the understanding of the extent of impacts. This sampling effort will develop the data to complete identification of COPCs, support the source area evaluations (e.g. risk assessments) and assist in the initial identification and screening of remedial alternatives, if appropriate. In this Phase it is anticipated that some individual LOUs (or groups of LOUs) will be evaluated as potential source areas and if impacts are confirmed, step out borings will be drilled to determine the extent of impact.