1. General

ENVIRONMENTAL RESTORATION PROJECT

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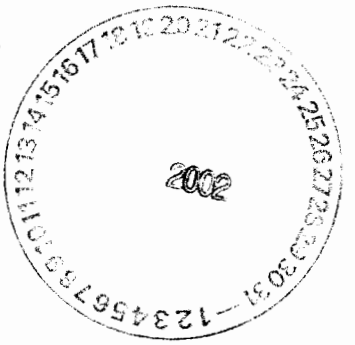

Mr. John Young, Corrective Action Project Leader
Permits Management Program
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East
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Santa Fe, NM 87505-6303

SUBJECT: REQUEST FOR THE MODIFICATION OF THE EXISTING, AND FUTURE HAZARDOUS SOLID WASTE AMENDMENTS (HWSA) PERMIT DIRECTION FOR THE COMPLETION OF ALLUVIAL WELLS

Dear Mr. Young:

This letter is a request for the modification of the existing, and future, HSWA Permit direction for the completion of alluvial wells. Currently, the Permit requires, 'the boreholes for casings and screens shall be a minimum of six (6) inches greater in diameter than the well casing or screen outer diameter'. A standard 4 inch well completion causes the construction (drilling) of a 10 inch borehole which provides a three (3) inch annular space between the well casing (screen) and the borehole wall. Based on the existing requirement for alluvial wells and the proposed alluvial well requirements in the draft 'Corrective Action Order' construction and sampling of the specified number of alluvial wells will be very costly and time consuming.

Because of technology improvements over the years it is now possible to install smaller diameter wells and still meet the completion requirements and QA/QC specified in the Permit. The Department Of Energy (DOE) and Los Alamos National Laboratory (LANL) requests that small diameter "pre-packed" wells installed with direct-push methods be allowed for use in the Resource Conservation and Recovery Act (RCRA) ground-water monitoring and characterization programs. All of the direct-push well installation and sampling methods will be implemented following standard industry practice and applicable to the American Society for Testing and Materials (ASTM) Standards (D 6001, D 6282, and D 6725). Numerous studies have been completed which show excellent correlation between ground-water samples from traditional augered monitoring wells and smaller diameter "pre-packed" wells installed with direct-push methods. Other advantages of the direct-push method includes cost and accessibility issues.

Costs for direct-push installed wells are typically one-half to one-third the price of traditionally installed wells with the added benefit of minimal investigative derived wastes generated during installation. The direct-push rigs are small compact track mounted units, which can access a variety of terrain, such as the densely forested canyon bottoms at LANL, with minimal environmental impact and often without the need to install access roads.

Direct-push pre-packed wells used at LANL will range in size from: ¾-inch inner diameter (I.D.) PVC with 1.4-inch outer diameter (O.D.) stainless steel mesh up to 1.25-inch I.D. PVC with 2.4-inch O.D. stainless steel mesh. Generally, the smaller the diameter of the pre-packed wells will be used in areas were deeper alluvial well installations are required. All of the pre-packed small diameter wells will be sampled using the low flow sampling methods outlined in the New Mexico Energy Department (NMED) position paper on low flow sampling. Thus, the same type and quality of data can be collected from smaller diameter wells more safely and for significantly less cost and time using direct-push methods.

Because of these improvements that allow the same quality of data to be collected we are requesting that NMED issue a letter that allows for the use of direct-push technology and the smaller diameter, low flow sampled alluvial wells for the collection of alluvial ground-water samples.

Please contact Thomas Whitacre at 665-5042 or Allyn Pratt at 667-4308 if there are questions concerning this request.

Sincerely,

David McInroy, Acting Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

Sincerely,

Everett Trollinger, Project Manager
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