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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 29, 2006

Mr. Johnny Guelker (PXO-ESEP)
Lead for Site Support
Department of Energy
Albuquerque Field Office
P.O. Box 30030
Amarillo, TX 79120

Mr. Dennis Huddleston, Manager
Department of Energy
Albuquerque Field Office
P.O. Box 30030
Amarillo, TX 79120

Re: **Conditional Approval** - Burning Ground Human Health Risk Assessment dated May 2006 U.S. Department of Energy (DOE), Pantex Plant
TCEQ Solid Waste Registration No. 30459
TCEQ Hazardous Waste Permit No. HW-50284
EPA ID No. TX4890110527

Dear Messrs. Guelker and Huddleston:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the May 2006 "*Burning Ground Human Health Risk Assessment*" (BGHHRA). The May 2006 BGHHRA was submitted in response to TCEQ correspondence dated March 10, 2006, and June 9, 2006, which provided comments on the initial April 2005 BGHHRA, as well as supplemental information requested by TCEQ. The May 2006 BGHHRA was also submitted to address comments submitted by Environmental Protection Agency (EPA) Region 6. The May 2006 BGHHRA reflects revisions and additional information presented in the previously reviewed "*Transmittal of Response to Texas Commission on Environmental Quality Comments on the Burning Ground Human Health Risk Assessment (April 2005)*", dated April 27, 2006.

The May 2006 BGHHRA presents the methodology and results of a human health risk assessment conducted at the Burning Grounds Waste Management Group (WGM-13) and Playa 3. The BGHHRA identifies chemicals of concern (COCs) that pose human health risks to be addressed in a corrective measures study and provides a basis for future development of cleanup levels in the corrective measures study. Based on our review, the BGHHRA satisfies the requirement in 30 Texas Administrative Code (TAC) §335.553(b)(2) for a baseline risk assessment of the solid waste management units (SWMUs) and/or areas of concern addressed in the report. TCEQ approval of the May 2006 BGHHRA is contingent upon DOE-Pantex implementing

Dear Messrs. Guelker and Huddleston
SWR No. 30459
September 29, 2006
Page 2

long-term monitoring to ensure potential future risk to human health and the environment is managed appropriately. The conditions associated with the TCEQ approval of the BGHHRA are as follows:

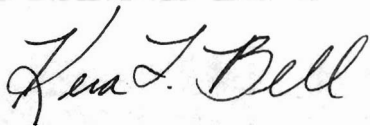
1. Long-term monitoring (LTM) of the perched and Ogallala aquifers will be required to evaluate the effectiveness of corrective measures and manage uncertainties in the investigation record (e.g., the presence of residual non-aqueous phase liquid and COCs above and below the fine grained zone, source(s) of historic detections of COCs in the Ogallala aquifer, etc.) and subsurface fate and transport modeling. The LTM plan will be established as part of the forthcoming Compliance Plan (CP-50284) process.
2. The risk assessment conclusions shall not justify any reduction of aspects of the LTM plan (e.g., COCs analyzed for, frequency and duration of monitoring, number and location of monitoring wells, etc.) that are necessary to sufficiently manage uncertainties in both the investigation record and risk assessment conclusions.
3.
 - a.) The risk assessment relies on subsurface fate and transport modeling to evaluate whether or not current concentrations of COCs in soil, soil gas, and perched groundwater may result in future concentrations in the Ogallala aquifer that exceed risk levels. The results of the modeling do not indicate an unacceptable future impact to the Ogallala aquifer. Although many of the assumptions and input parameters used in the modeling are conservative in nature, there is inherent uncertainty in the simulations themselves, as well as uncertainties between model predictions and past observations in site data.
 - b.) In the event that analytical results obtained through implementation of the LTM plan are not commensurate with conclusions of the investigation and/or risk assessment, DOE-Pantex must implement any additional assessment and/or corrective measures necessary to protect human health and the environment; therefore, the LTM plan shall include a well-defined contingency plan specifying the monitoring locations and concentrations of COCs that would trigger implementation of the contingency plan and the actions to be taken to mitigate the risk.
4. The evaluation of risk in the BGHHRA associated with radionuclide compounds was not conducted by TCEQ and is therefore not associated with the TCEQ's approval of the BGHHRA. EPA Region 6 is the delegated authority of radionuclide compounds per the December 21, 1994 Memorandum of Agreement between the EPA and the TCEQ.
5. DOE-Pantex must address any conditions of approval associated with EPA Region 6's approval of the BGHRRA as a condition of TCEQ's approval.

Please be aware that it is the continuing obligation of persons associated with a site to ensure that municipal hazardous waste and industrial solid waste are managed in a manner which does not cause the discharge or imminent threat of discharge of waste into or adjacent to waters in the state, a nuisance, or the endangerment of the public health and welfare as required by 30 TAC §335.4.

Dear Messrs. Guelker and Huddleston
SWR No. 30459
September 29, 2006
Page 3

The TCEQ is in receipt of the Corrective Measures Study (CMS) report required by 30 TAC §335.553(b)(3). The TCEQ will initiate review of the CMS upon completion of the review of the previously submitted March 2006 Baseline Human Health Risk Assessment Report. Questions concerning this letter should be directed to me at (512) 239-6875. When responding by mail, please submit an original and one copy of all correspondence to the TCEQ Environmental Cleanup Section I at the letterhead address using mail code number MC-127. An additional copy should be submitted to the TCEQ Region 1 Office in Amarillo. The TCEQ Solid Waste Registration number should be referenced in all submittals.

Sincerely,

A handwritten signature in cursive script that reads "Kera L. Bell". The signature is written in black ink on a light-colored background.

Kera L. Bell, Project Manager
Environmental Cleanup Section I, Team 2
Remediation Division
Texas Commission on Environmental Quality

KB/al

cc: Mr. Jim McWilliams, Project Manager, TCEQ Region 1 Office - Amarillo
Ms. Camille Hueni, Superfund Division, Texas Section (6SF-AP), USEPA Region VI