ENERGY AND ENVIRONMENT CABINET

Steven L. Beshear
Governor

Department for Environmental Protection
Division of Waste Management
200 Fair Oaks, 2nd Floor
Frankfort, Kentucky 40601-1190
www.kentucky.gov

Leonard K. Peters
Secretary

February 7, 2014

Ms. Rachel H. Blumenfeld
US Department of Energy
Portsmouth/Paducah Project Site Office
PO Box 1410
Paducah, Kentucky 42002

RE: Requested Modification to the Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation / Feasibility Study (SWMU 4 Sampling and Analysis Plan) (DOE/OR/07-2179&D2/A2/R2)
Paducah Gaseous Diffusion Plant
Paducah, McCracken County, Kentucky
KY8-890-008-982

Ms. Blumenfeld:

In accordance with Section XX.J of the Federal Facility Agreement, Kentucky hereby requests that the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/ Feasibility Study (SWMU 4 Sampling and Analysis Plan)* be modified to document additional field activities that Kentucky and U.S. EPA have requested be performed at SWMU 4. When the Sampling and Analysis Plan for SMWU 4 was developed it was anticipated that shallow Phase II boring data would serve to inform the placement of later phase borings. This was due to the assumption that if contamination was present at depth then it would also be present in the shallower soils. This was later determined not to be the case. Consequently, the placement of the Phase III borings relied mostly on historical data. This resulted in all of the 60 foot Phase III borings being placed in the southern part of SWMU 4. Therefore, it is Kentucky's position that eleven additional 60 foot borings should be drilled in the northern portion of SWMU 4 in order to increase the level of confidence regarding the extent of contamination in the northern cells. An additional 5 borings are also required to further delineate hot spots present in cell #4 and near cell #1. Please revise the Sampling and Analysis Plan for SWMU 4 to include these additional 60 foot borings (see attached map) and proceed with the additional field work in as timely a manner as possible.

If you have any questions or require additional information, please contact Gaye Brewer at (270) 898-8468, or e-mail at gaye.brewer@ky.gov.

Sincerely,

April J. Webb

April J. Webb, P.E., Manager
Hazardous Waste Branch

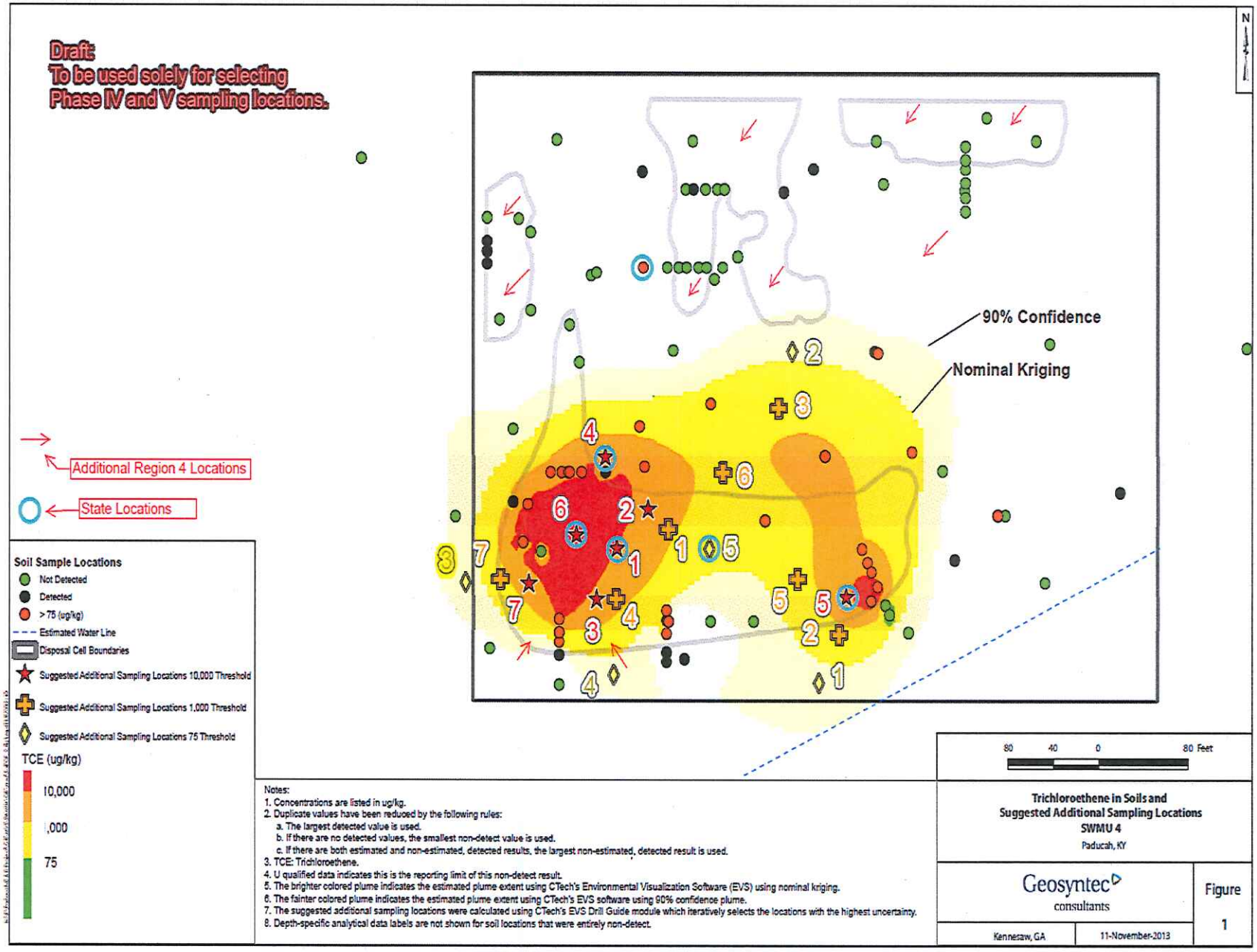
AJW:tm:lww:gb

ec: Jennifer Tufts, US EPA - Region 4, Tufts.Jennifer@.epa.gov
Jon Richards, US EPA – Region 4; Richards.jon@epa.gov
William E. Murphie, DOE – Paducah, William.murphie@lex.doe.gov
William Creech, DOE - Lexington; William.creech@lex.doe.gov
Rich Bonczek, DOE – Lexington, Rich.Bonczek@lex.doe.gov
Lisa Santoro, DOE – Paducah; lisa.santoro@lex.doe.gov
Jennifer Woodard, DOE – Paducah, Jennifer.Woodard@lex.doe.gov
Rachel Blumenfeld, DOE – Lexington, Rachel.Blumenfeld@lex.doe.gov
Kim Crenshaw, DOE – Paducah, kim.crenshaw@lex.doe.gov
Mark J. Duff, LATAKY – Kevil; mark.duff@lataky.com
Myrna Redfield, LATAKY – Kevil, Myrna.Redfield@lataky.com
John Wesley Morgan, LATAKY – Kevil, John.Morgan@lataky.com
Jana White, LATAKY – Kevil; jana.white@lataky.com
Bruce Ford, LATAKY – Kevil; bruce.ford@lataky.com
Jim Erickson, LATAKY – Kevil, Jim.Erickson@lataky.com
Frazier Johnstone, LATAKY – Kevil, Edward.Johnstone@lataky.com
Greg Shaia, LATAKY – Kevil, Greg.Shaia@lataky.com
John Samples, LATAKY – Kevil, John.Samples@lataky.com
Craig Jones, LATAKY – Kevil, craig.jones@lataky.com
Darla Bowen, LATAKY – Kevil; darla.bowen@lataky.com
Sunny Osborne, LATAKY – Kevil; sunny.osborne@lataky.com
Tracey Duncan, P2S – Paducah; tracey.duncan@lex.doe.gov
Rebecca Wren, P2S – Paducah, Rebecca.Wren@lex.doe.gov
Christa Dailey, P2S – Paducah, christa.dailey@lex.doe.gov
Bethany Jones, P2S – Paducah; Bethany.jones@lex.doe.gov
Jim Ethridge, CAB – Paducah; jim@pgdpcab.org
Matt McKinley, CHFS – Frankfort, matthewW.mckinley@ky.gov
Stephanie Brock, CHFS – Frankfort, StephanieC.Brock@ky.gov
Nathan Garner, CHFS – Frankfort; Nathan.garner@ky.gov
Todd Mullins, KDWM – Frankfort; Todd.Mullins@ky.gov

Gaye Brewer, KDWM – Paducah, gaye.brewer@ky.gov
Jeff Gibson, KDWM – Frankfort, Jeffrey.Gibson@ky.gov
Mike Guffey, KDWM-Frankfort, mike.guffey@ky.gov
Leo W. Williamson, KDWM – Frankfort, Leo.Williamson@ky.gov

DWM File: #1100-C, Graybar AIN20110009

Attachment: Boring Location Map



Notes:
1. Concentrations are listed in ug/kg.
2. Duplicate values have been reduced by the following rules:
   a. The largest detected value is used.
   b. If there are no detected values, the smallest non-detect value is used.
   c. If there are both estimated and non-estimated, detected results, the largest non-estimated, detected result is used.
3. TCE: Trichloroethene.
4. U qualified data indicates this is the reporting limit of this non-detect result.
5. The brighter colored plume indicates the estimated plume extent using CTech's Environmental Visualization Software (EVS) using nominal kriging.
6. The fainter colored plume indicates the estimated plume extent using CTech's EVS software using 90% confidence plume.
7. The suggested additional sampling locations were calculated using CTech's EVS Drill Guide module which iteratively selects the locations with the highest uncertainty.
8. Depth-specific analytical data labels are not shown for soil locations that were entirely non-detect.

Trichloroethene in Soils and Suggested Additional Sampling Locations
SWMU 4
Paducah, KY

Geosyntec consultants

Kennesaw, GA | 11-November-2013

Figure 1