



State of Ohio Environmental Protection Agency

Southwest District Office

401 East Fifth Street
Dayton, Ohio 45402-2911
(513) 285-6357
FAX (513) 285-6249

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George V. Voinovich
Governor

November 8, 1999

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: 2ND ROUND RTC, BASELINE GROUNDWATER FOR OSDF

Dear Mr. Reising:

The purpose of this letter is to resolve the pending issues related to two outstanding comments Ohio Environmental Protection Agency made on the draft Technical Memorandum for the On-Site Disposal Facility Cell 1 Baseline Groundwater Conditions (September 1998).

DOE's response to Comment 2 was satisfactory, however Comment # 1 regarded collecting background samples from the horizontal till wells for two complete years prior to waste placement in the associated cell of the OSDF. The purpose of the two year sampling was to allow for seasonal variation and to allow for independent samples. Specifically, we commented that the horizontal till well for OSDF Cell 4 should begin this construction year to allow for two full years of data collection prior to first waste placement. The DOE response was that it would be physically impossible to construct the Cell 4 horizontal till wells because the OSDF decontamination facility is in the way. As an alternative, DOE proposes installing a vertical well "near" where the horizontal till well will be located in the same stratigraphic interval. The Ohio EPA does not consider this to be an acceptable solution. Regardless of the proximity of the vertical well to the location of the horizontal till well, there will be uncertainty about the validity of comparing data from the two wells. Our determination is that it is preferable to take fewer samples than to introduce the confounding issue of commingling vertical and horizontal well data for statistical purposes.

It will not be necessary to hold a meeting to resolve Ohio EPA's comment on proper statistical practices and inconsistencies with the Ohio Solid Waste Rules. In the case of wells used for intra-well comparison, the Rules do not explicitly require that two years of baseline samples be taken prior to first waste placement. The standard statistical practices we referred to reflect our concern that enough baseline data be collected to adequately

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define the normal fluctuations in water quality. Obviously, it is in no ones best interest to mis-interpret normal water quality fluctuations as an out-of-control situation. Therefore, Ohio EPA recommends that the horizontal wells for the remaining cells be installed as soon as feasible in an effort to bracket the pre-waste placement water quality fluctuations.

If you have any questions, please contact Tom Ontko or me.

Sincerely,

Tom Ontko

for Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Francie Hodge, Tetra Tech EM Inc.
Ruth Vandergrift, ODH