Department of Energy

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JUN 13 2001

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 W. Jackson Boulevard
Chicago, IL 60604-3590

DOE-0642-01

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 E. 5th Street
Dayton, OH 45402-2911

Dear Mr. Saric and Mr. Schneider:

REQUEST TO REDUCE THE NUMBER OF IEMP GROUNDWATER MONITORING WELLS TO BE SAMPLED FOR DIOXINS

This letter formalizes the subject request and provides supporting information as discussed with you in the weekly site update teleconferences earlier this year. As part of our groundwater remedy performance monitoring identified in the Integrated Environmental Monitoring Plan (IEMP), every five years we are scheduled to sample for the "<N" constituents in the Great Miami Aquifer. This year is the first of the five-year sampling events. The estimated cost for this five-year sampling activity is $267,540.00. Approximately 50 percent of this cost would go toward the analysis of two chlorinated dibenzo-p-dioxin (CDD) dioxins (2,3,7,8-tetrachlorodibenzo-p-dioxin and octachlorodibenzo-p-dioxin). As discussed below, the risk posed to the aquifer from these two dioxins does not warrant this projected expenditure.

Based on a literature review, dioxin contamination is more of a concern for soils than a groundwater concern. When released to wastewater, some dioxins are broken down by sunlight, some evaporate to air, but most attach to soil before ever reaching groundwater. They are, therefore, not considered as being mobile constituents of concern for the aquifer.

Recycled and Recyclable

The enclosed map shows the locations and media where dioxins have been detected at the Fernald Environmental Management Project (FEMP). The data provided on the map is consistent with the information provided by the literature review noted above. At the FEMP, there have been several dioxin hits in soil, sediment, pit material, and pit leachate. However, there have only been two instances where perched water samples contained detectable quantities of dioxin, and only one instance where dioxins have been detected in the aquifer beneath the FEMP. This one detection was made in the Waste Storage Area (Monitoring Well 2821).

Considering this information, the risk posed to the aquifer by these two dioxins does not justify the high cost of analyzing for them in samples collected from all the monitoring wells listed in the IEMP program (one hundred twenty wells). Therefore, it is being proposed to scale this program back to nineteen monitoring wells located in/around the source areas where dioxins have been detected in overlying media, and there is a known migration path that the dioxins could have traveled to reach the aquifer. The proposed wells to be monitored for dioxins are noted on the enclosed map. This reduction from one hundred twenty wells down to nineteen should result in an analytical laboratory costs savings of approximately $110,000 this year and another $110,000 in 2006 (each five-year sampling event). Additional cost savings will also be realized in the sampling and data management areas. It is also proposed that the shortened list of wells to be sampled for dioxins be re-evaluated for further reductions based on the results of the sampling being conducted this year. It is anticipated that this re-evaluation would be conducted as part of the preparation of the annual Integrated Site Environmental Report for 2001.

Please provide us with your concurrence and/or your comments to this request. Should you have any questions regarding this request, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny Reising

FEMP:R.J. Janke

Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosures

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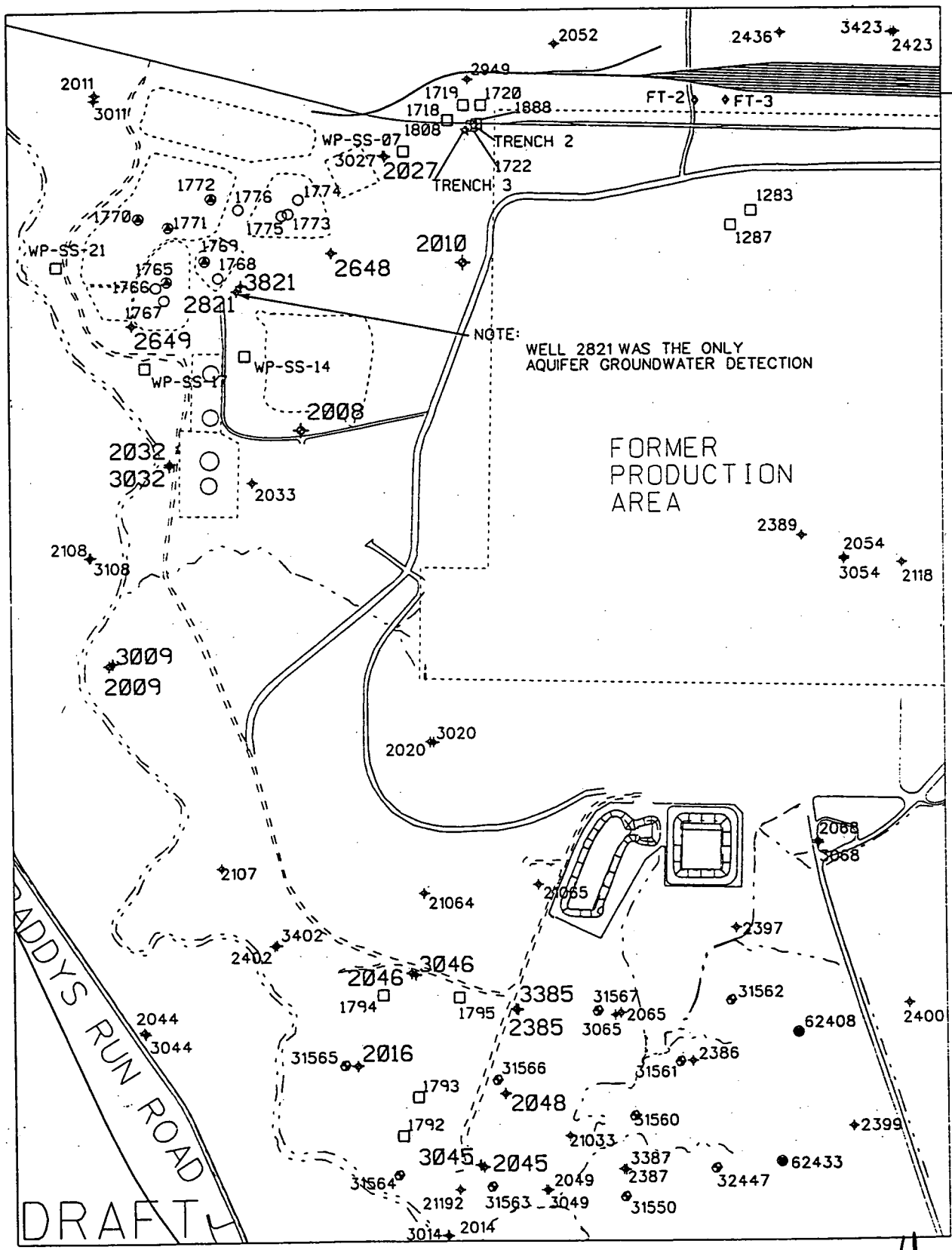
cc w/enclosures:
R. J. Janke, OH/FEMP
J. Kappa, OH/FEMP
K. Nickel, OH/FEMP
A. Tanner, OH/FEMP
K. Chaney, EM-31/CLOV
N. Hallein, EM-31/CLOV
G. Jablonowski, USEPA
T. Schneider, OEPA-Dayton (three copies of enclosures)
F. Bell, ATSDR
F. Hodge, Tetra Tech
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
V. Dastillung, FRESH
D. Brettschneider, Fluor Fernald, Inc./MS52-5
D. Carr, Fluor Fernald, Inc./MS2
M. Frank, Fluor Fernald, Inc./MS90
T. Hagen, Fluor Fernald, Inc./MS65-2
W. Hertel, Fluor Fernald, Inc./MS52-5
S. Hinnefeld, Fluor Fernald, Inc./MS52-2
M. Jewett, Fluor Fernald, Inc./MS52-2
T. Walsh, Fluor Fernald, Inc./MS46
AR Coordinator, Fluor Fernald, Inc./MS78
ECDC, Fluor Fernald, Inc./MS52-7



DIOXIN DETECTIONS AND MONITORING WELLS PROPOSED FOR DIOXIN SAMPLING