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Department of Energy

Ohio Field Office  
Fernald Area Office

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



APR 15 1998

DOE-0678-98

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

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

Dear Mr. Saric and Mr. Schneider:

**MANAGEMENT OF WASTEWATER STREAMS CONTAINING F-LISTED CONSTITUENTS -  
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT**

This letter serves to identify the Fernald Environmental Management Project's (FEMP) intent to manage certain wastewater streams that contain Resource Conservation and Recovery Act (RCRA) F-listed spent solvent constituents, under the mixture rule exclusion found at OAC 3745-51-03((a)(2)(e) and 40 CFR 261.3(a)(2)(iv). These wastewater streams specifically include perched water from the Sludge Drying Beds and Fire Training Facility areas, Hazardous Waste Management Unit (HWMU) decontamination water, and containerized wastewaters presently in inventory. The use and application of the mixture rule exclusion to these wastewaters was the subject of a meeting on March 20, 1998, attended by representatives of Ohio Environmental Protection Agency (OEPA), Department of Energy (DOE), and Fluor Daniel Fernald (FDF). In accordance with the consensus from that meeting, we determined that these wastewaters met the mixture rule exclusion criteria and can therefore be appropriately managed as a wastewater exempted from RCRA listing through the on-site wastewater treatment system.

The FEMP believes that there are sufficient systems (administrative and engineered) in place which allow the FEMP the ability to manage wastewater streams containing RCRA F-listed constituents within the intent of the mixture rule exclusion. The preamble to the mixture rule exclusion states the exclusion was "...developed to provide that the mixture rule does not apply to mixtures of nonhazardous wastewater that receive small quantities of listed hazardous wastes which are not principal wastewater streams, and which are reasonably and efficiently managed by being discharged into a plant's wastewater treatment system."

The wastewaters the FEMP intends to manage are not principal wastewater streams, are small in nature relative to the primary wastewater flow, and generally contain concentrations of spent solvents far below the "after mixing" thresholds discussed in the rule. The FEMP intends to manage such waste streams through Phase 2 of the Advanced Wastewater Treatment Facility (AWWT). This phase of the AWWT contains activated carbon adsorption as a unit operation to address the removal of volatile organic compounds from the FEMP's wastewater. The AWWT discharges are regulated under the current FEMP National Pollutant Discharge Elimination System (NPDES) Permit.

For the purposes of demonstrating compliance with the stated thresholds, the FEMP has identified the Surge Lagoon as the head works of the Phase 2 AWWT system (when dealing with batch volume discharges) and the flow-through capacity of the Phase 2 AWWT system for those waste streams discharged on a more continuous basis. These identifications are necessary as they will be the basis for evaluating individual waste streams, which may contain concentrations of F-listed spent solvents above the stated thresholds prior to mixing with other wastewaters.

A specific topic discussed in our meeting related to the management of perched groundwater from the sewage treatment plant area (inclusive of the Sludge Drying Beds) within the Area 1 Phase 2 Soil Remediation Project. Additional discussion of the application of the mixture rule exclusion as it relates to this specific wastewater stream will be provided in the response to comments document and final Integrated Remedial Design Package (IRDP) for this area. Discussion on application of the mixture rule exclusion for management of remediation-generated water from both the Sludge Drying Bed area and Fire Training Facility Area will be inserted into the Sitewide Excavation Plan. Similar discussion for the Fire Training Facility area will be provided in the IRDP for that soil remediation area.

We believe managing these wastewater streams consistent with the preamble of the mixture rule exclusion allows the FEMP to facilitate treatment for these constituents in a protective, reasonable, and cost-effective manner. Additionally, the mixture rule exclusion provides flexibility in dispositioning AWWT sludges in accordance with on-site Waste Acceptance Criteria (WAC) for the On-Site Disposal Facility (OSDF), or off-site WAC for a permitted commercial disposal facility as appropriate.

If you have any questions concerning this request, please contact Ms. Kathleen Nickel at (513) 648-3166.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Nickel

cc:

N. Hallein, EM-42/CLOV  
G. Jablonowski, USEPA-V, SRF-5J  
J. Saric, USEPA-V, SRF-5J  
R. Beaumier, TPSS/DERR, OEPA-Columbus  
F. Bell, ATSDR  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODH  
F. Barker, Tetra Tech  
D. Abbott, FDF/51  
D. Brettschneider, FDF/52-5  
D. Carr, FDF/52-2  
J. D. Chiou, FDF/52-5  
T. Crawford, FDF/52-5  
T. Hagen, FDF/65-2  
J. Harmon, FDF/90  
R. Heck, FDF/2  
S. Hinnefeld, FDF/2  
M. Jewett, FDF/52-5  
F. Johnston, FDF/52-2  
K. Little, FDF/52-5  
M. Strimbu, FDF/52-1  
T. Walsh, FDF/52-1  
AR Coordinator, FDF/78  
EDC, FDF/52-7