

**3982**

**NITRIC ACID TANK REMOVAL ACTION WORK  
PLAN AND CLOSURE**

**11/30/92**

**OEPA/DOE-FN  
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LETTER**

R-035-207.1

Original File Copy



State of Ohio Environmental Protection Agency

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3982

George V. Voinovich  
Governor

November 30, 1992

Re: NITRIC ACID TANK  
REMOVAL ACTION WORK PLAN  
AND CLOSURE

Mr. Jack R. Craig  
Project Manager  
U.S. DOE FEMP  
P.O. Box 398705  
Cincinnati, Ohio 45239

Dear Mr. Craig:

Listed below are Ohio EPA comments on the Nitric Acid Tank Car Removal Action Work Plan and Closure Plan Information and Data Package. The comments are divided up into comments on the removal action (CERCLA) and comments on the closure information (RCRA).

REMOVAL ACTION

General Comment:

- DOE should consider a limited removal of soils to clean close this unit. DOE should keep open the option of removing some soils if a clean closure could be reached with minimal excavation.

Specific Comments:

- Section 3.2.2.4, pgs. 3-14 and 15: The document fails to detail how solids/sludges will be removed from the tanker, if they exist. The work plan should include this information.
- Section 3.3.2.2, pgs. 3-27: It is unclear as to whether reprocessed materials would have been digested in nitric acid transported in the tanker. If this is a possibility, DOE should analyze the tanker contents for a more comprehensive list of radionuclides.
- Figure 3-1, pgs. 3-28: If figure is drawn to scale, provide a scale. If the figure is not drawn to scale, note it on the figure.

(janke(rj))  
action response  
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4. Section 3.4.4, pgs. 3-32, 1st bullet: The plan should provide additional information concerning treatment and disposal of the liquid. The material is a hazardous waste and an integral part of the removal action and must be accounted for within the work plan.
5. Section 3.4.4, pgs. 3-32, 2nd bullet: DOE should commit to at least removing soils, if sampling results suggest contaminated soils are readily removable.
6. Section 3.4.5.3, pgs. 3-37: If the decontaminated tanker is no longer useable or is surplus, DOE should consider adding the tanker to the Scrap Metal Pile Removal Action.
7. Section 3.4.5.6, pgs. 3-39 & 40: The 3rd paragraph on pg. 39 states 3 ft<sup>3</sup> of solids will be generated by external decontamination yet the 1st full paragraph on pg. 40 suggests .5 ft<sup>3</sup> will be generated. Please clarify.

#### CLOSURE INFORMATION (RCRA)

1. Closure plans must be submitted to the Director, Ohio EPA as required by Ohio Administrative Code (OAC) Rule 3745-66-23. Submit a copy of this closure plan to the Director, Ohio EPA.
2. DOE-FEMP must fully characterize the tank car contents to determine whether it is TCLP toxic. DOE-FEMP must also identify all hazardous constituents contained within this material. Please refer to the Ohio EPA Closure Plan Review Guidance (page 19, 3.5) for further information.
3. Section 3.2.2.2 of the plan very briefly describes the procedures to be used to neutralize the tank contents. DOE-FEMP must provide additional details regarding this process. This additional information should demonstrate how DOE-FEMP will conduct this treatment in a manner that will not: 1) Generate extreme heat or pressure, fire or explosion, or violent reaction; 2) Produce uncontrolled toxic units, fumes, or dusts, or gases in sufficient quantities to threaten human health; 3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; 4) Damage the structural integrity of the device or facility containing the waste; or 5) Through other means threaten human health or the environment.

DOE-FEMP must also include provisions for analyzing the waste after treatment to ensure neutralization is complete.

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4. The plan states Section 3.2.2.3 that in the event the waste is TCLP toxic, it will be transferred to the existing Nitric Acid Tanks. The plan must specify which tank or tanks will receive the waste, and must provide information which demonstrates that the waste is compatible with the existing contents of the Nitric Acid Tank(s).
5. Section 3.2.2.5 of the plan states that remediation of any soil will be performed in conjunction with OU-5 remedial activities. Ohio EPA has indicated to DOE-FEMP on numerous occasions that if a clean closure of a unit is reasonably feasible, then DOE-FEMP must pursue clean closure. For example, if removal of the top six inches of soil over a 100 square foot area will achieve clean closure, DOE-FEMP should undertake soil removal activities.

Therefore, the upfront assumption that soil remediation will be deferred to the CERCLA process is unacceptable. DOE-FEMP must revise the plan to indicate that the goal of the plan is to clean close the unit. Should sampling and analysis of the soil under and around the unit demonstrate that clean closure is not achievable, DOE-FEMP must submit an amended closure plan which describes subsequent actions that will be taken.

6. It is unclear in section 3.3.1.2 whether the wastes will be analyzed for metals using total analysis, TCLP analysis, or both. As indicated in comment 2, the waste must be characterized to determine whether it is TCLP toxic, and all hazardous constituents contained in the waste must be identified.
7. In section 3.3.1.3 of the plan, it is stated that the reinseate will be analyzed for TCLP metals. It is unclear as to whether totals analysis or TCLP analysis will be clean. The reinseate must be seen using total analysis.
8. Section 3.4.4 of the plan states that the plan covers transferring the Tank Car liquid to Tank 17 and does not cover actions to be taken with the liquid once it is contained in Tank 17. This is unacceptable. OAC 3745-66-11 states that the owner shall close his facility in a manner that: a) Minimizes the need for further maintenance; b) Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, ....; and c) Complies with the closure requirements of rules .... of the Administrative Code.

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The plan as written does not minimize the need for further maintenance nor minimize the post-closure escape of hazardous waste and/or constituents. In the event that the waste is transferred to Tank 17, the plan must include provisions to demonstrate the waste is completely neutralized and a description of the ultimate disposition of the waste, along with a schedule for these activities. In the event the waste is transferred to the Nitric Acid Tank(s), the ultimate disposition of the waste must be addressed.

9. Section 3.4.4 also states that soil removal will be performed only to obtain soil characterization samples. This is unacceptable; see comment 5.
10. Section 3.4.5.6 states that it is anticipated that most of the decontamination water will have a pH greater than 2. This cannot be assumed. The plan must provide for adequate characterization of the decontamination water prior to pumping to Tank 17.
11. Section 4.1.1 discusses clean standards for soil. This section of the plan is very unclear. The plan does not state what values will be used for background for the metals. Please refer to the Ohio EPA Closure Guidance Document for guidance on acceptable background levels and procedures for establishing clean standards. This section of the plan must be revised to more clearly reflect the requirements of Ohio EPA's Closure Guidance Document. DOE should consider using the soil background study conducted in 1991.

These comments are offered as preliminary comments to satisfy the CERCLA review process. This closure plan is subject to further review and comment per the process described in OAC 3745-66-12. This process cannot begin until a closure plan is submitted to the Director, Ohio EPA (see comment 1.)

If you have any questions about these comments please contact Tom Schneider, Phil Harris, or me.

Sincerely,



Graham E. Mitchell  
FEMP Project Coordinator

GEM/ycr