



## Department of Energy

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02 NOV 2001

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SRF-5J  
77 West Jackson Boulevard  
Chicago, IL 64604-3590

DOE-0092-02

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, OH 45405-2911

Dear Mr. Saric and Mr. Schneider:

### **DIRECT HAUL OF BULK WASTE MATERIALS TO THE WASTE PITS REMEDIAL ACTION PROJECT**

- References:
- 1) Letter, J. Reising to J. Saric and T. Schneider, "Transferred Soil Pile," dated May 29, 2001
  - 2) Letter, J. Reising to J. Saric and T. Schneider, "Stockpile Amendment to the Final WPRAP Excavation Plan," dated June 24, 2000

This letter provides formal notification of plans being made by the United States Department of Energy, Fernald Environmental Management Project (DOE-FEMP), to directly haul bulked containerized waste material to the Waste Pits Remedial Action Project (WPRAP), for off-site disposal at Envirocare via unit train. The planned approach for the bulked containerized waste material is similar to that previously used by DOE-FEMP to disposition 4,000 cubic yards of Area 3A soils, which were excavated and hauled directly to WPRAP in March 2001.

Currently, Fluor Fernald, Inc. stages bulked containerized materials at Stockpile 7, and periodically excavates and hauls the material to WPRAP for processing. The direct haul approach would simplify the process of transferring these materials to WPRAP by reducing the number of times they must be handled. Stockpile 7 would remain in use on a more limited basis; for example, for routine staging of filter cake from the Advanced Waste Water Treatment Facility (AWWT) prior to transfer to WPRAP. Stockpile 7 also would be used for other bulk waste streams when direct haul is impractical, such as when operational constraints or traffic conflicts arise.

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The bulked containerized waste materials consist of low-level radioactively contaminated soil, soil-like and debris materials that exceed the Waste Acceptance Criteria (WAC) for the On-Site Disposal Facility (OSDF). Under the direct haul alternative, these materials would be bulked by Waste Generator Services (WGS) to an articulating dump truck at the east section of the Plant 1 Pad or similar controlled area that facilitates load-out (see Attachment 1). The articulating dump truck is the preferred conveyance from a radiological standpoint, due to its high clearance. Dust controls currently used by WGS to bulk material for Stockpile 7 vary, depending on the nature of the waste stream. This also would be true for bulking material to an articulating dump truck. At a minimum, WGS monitors for visible dust and employs a water mist while bulking debris, as well as soil and soil-like materials that have low moisture content.

Bulked material hauled directly to WPRAP can be used for blending with wetter materials that are excavated from the waste pits. Therefore, it is preferable that the bulked material is not transferred directly into WPRAP facilities that are used to stage material for load-out into railcars. Instead, the bulked material would be staged at Waste Pit 3, either within the excavated footprint or on the surface, such that it could be used as needed (see Attachment 2). This above-grade option is desirable to minimize any negative impacts to ongoing waste pits excavation operations, and to maximize accessibility to the blending material.

Methods used to manage the staged material at Waste Pit 3 would be consistent with previous discussions and correspondence between DOE-FEMP and the regulators. As the bulked material is staged at Waste Pit 3, it would be secured to mitigate water ingress and erosion, and minimize dust emissions. This material would be secured by proof rolling or bucket compacting to provide a tight surface, or covering with a fabric cover, or by spraying with ConCover or equivalent. The actual method to be used would be dependent upon the intended use of the material and the time period the material will be staged. The staged material would be inspected on a weekly basis when not being worked, and repairs/reapplication performed as necessary.

Existing earth moving equipment would be used to remove the material from the Waste Pit 3 stockpile on an as-needed basis, for blending with waste pit material. During the removal process, the working face would be compacted as necessary to minimize erosion and control dust, and sprayed with water, as additional dust controls were needed.

Attachment 3 includes information regarding the initial waste population of approximately 970 containers, which would be bulked and direct hauled to WPRAP. Attachment 3 also includes a description of the process used to evaluate this initial container population. A similar evaluation process would be used for any additional containerized waste materials that are dispositioned in this manner. Overall, an estimated 5,000 containers of material (including those in Attachment 3) are expected to be bulked and direct hauled to the WPRAP over the next 12 to 15 months.

Mr. James A. Saric  
Mr. Tom Schneider

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DOE-0092-02

If you have any questions or comments, please contact me at (513) 648-3139.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Skintik

Enclosures

cc w/enclosures:

R. Greenberg, EM-31/CLOV  
N. Hallein, EM-31/CLOV  
T. Schneider, OEPA-Dayton (three copies of enclosures)  
G. Jablonowski, USEPA-V, SRF-5J  
F. Bell, ATSDR  
F. Hodge, Tetra Tech  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

J. Hall, OH/FEMP  
D. Lojek, OH/FEMP  
J. Sattler, OH/FEMP  
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J. Buckley, Fluor Fernald, Inc./MS52-3  
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M. Cherry, Fluor Fernald, Inc./MS52-2  
J. D. Chiou, Fluor Fernald, Inc./MS64  
T. Clark, Fluor Fernald, Inc./MS52-3  
T. Hagen, Fluor Fernald, Inc./MS65-2  
F. Johnston, Fluor Fernald, Inc./MS52-5  
S. Lorenz, Fluor Fernald, Inc./MS52-5  
T. Walsh, Fluor Fernald, Inc./MS46  
ECDC, Fluor Fernald, Inc./MS52-7



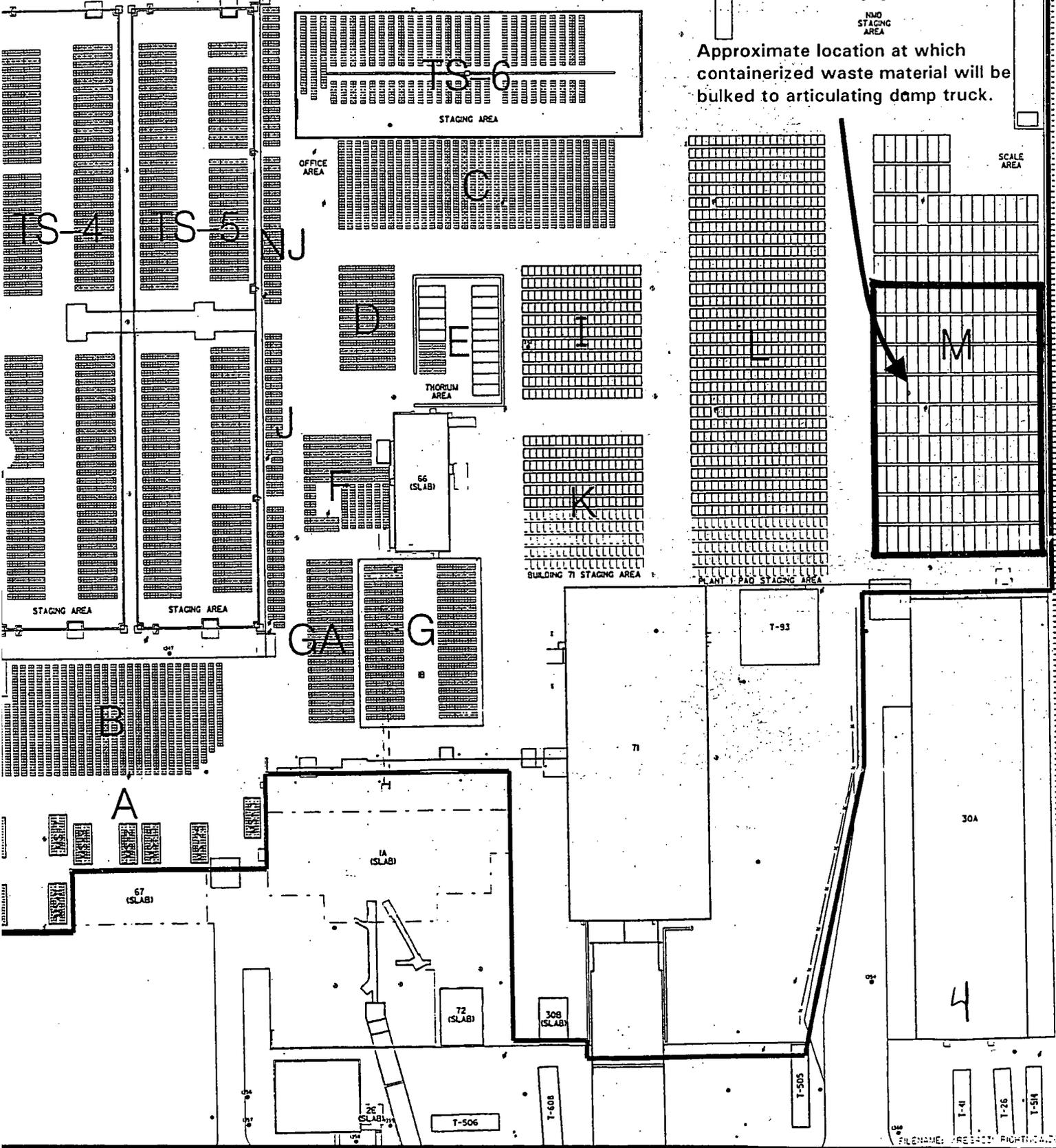
HALL ROAD

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N  
NMO STAGING AREA

Approximate location at which containerized waste material will be bulked to articulating dump truck.



TS-6  
STAGING AREA

OFFICE AREA  
C

D  
THORIUM AREA  
E

I

K  
BUILDING 71 STAGING AREA

L  
PLANT 1 PAD STAGING AREA

SCALE AREA  
M

TS-4  
TS-5  
STAGING AREA  
STAGING AREA

66 (SLAB)  
F  
G  
GA

A  
67 (SLAB)  
D

H  
71 (SLAB)  
72 (SLAB)  
308 (SLAB)

71  
T-93

30A  
4

T-506  
T-608  
T-505  
2E (SLAB)

T-4  
T-26  
T-5H  
FILENAME: RES402.FIGHTING



## Initial Wastes for Direct Haul

The containerized materials identified below are not classified as RCRA hazardous or regulated by TSCA. They all contain significantly less than 1% Uranium. The Waste Acceptance Organization (WAO), Environmental Compliance (EC) and WPRAP Operations have reviewed the inventory for potential impacts on WAC compliance, runoff and material processing. Their approvals, as documented on a site document called a Request for Disposal (RFD) form, indicate that the material is appropriate for managing bulk through WPRAP for disposition to the Envirocare of Utah facility. Each of the RFD packages includes a data summary for chemical and radiological constituents of concern (COCs) that support the waste stream determinations. During field implementation of bulking activities, WAO will be present to: verify that the correct containers are bulked, visually inspect the material for prohibited items and size requirements, and document compliance with WAC requirements using a Field Tracking Log (FTL).

### RFD #1001 - 32 White Metal Boxes (WMBs)

Sewage Treatment Plant (STP): Soil

### RFD #1103 - 57 WMBs

South Plume Groundwater Treatment project: Soil, concrete & rubble

### RFD #1110 - 23 WMBs

STP: Soil, sod, gravel

Building 69 & 78: Mud, dirt, concrete

K-65/Area 34: Soil, rock, sand, bricks, concrete

### RFD #1111 - 83 WMBs

Waste Pits 1 & 3: Discard residues

Waste Pit 2: Sludge

Building 69 & Boiler Plant: Soil/mud, debris, lime

STP: Refractory brick

Various: Sump/filter cake

### RFD #1117 - 17 WMBs

General Sump, Plant 8 Eimco & Oliver filters: Sump/filter cake

### RFD #1118 - 22 WMBs

Lab: Concrete/soil

Construction: Gravel/soil, buckets, plastic, absorbent pads

STP: Soil

Building 69: Debris, mud, gravel

WGS: Rubble/scrap

Plant 5: Soil, rocks, bricks

Plant 8: Soil, rocks, bricks

Boiler Plant: Lime, soil

### RFD #1123 - 735 Drums

Plant 8 Eimco: Filter cake

Plant 4 Tank Farm: Discard residues