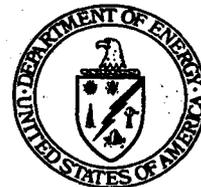




## Department of Energy

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



JUN 10 2002

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

DOE-0494-02

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

Dear Mr. Saric and Mr. Schneider:

### WASTE PIT REMEDIAL ACTION PROJECT DCN REGARDING TRUCK TARPING

Reference: Letter, T. Schneider to J. Reising, "Re: DISAPPROVAL - WPRAP  
 DCN 1103," dated May 10, 2002

The purpose of this letter is to respond to the Ohio Environmental Protection Agency's (OEPA) disapproval of DCN 1103 and to transmit, as requested in the disapproval, a revised DCN (DCN 1148) to the OEPA.

To date, the Department of Energy (DOE) has processed and safely shipped more than 350,000 tons of waste materials and collected more than 100,000 air samples on the Waste Pit Remedial Action Project (WPRAP). Utilizing the knowledge gained from this experience, the WPRAP has adjusted to the varying conditions encountered by increasing engineering controls where needed (e.g., Pug Mill Ventilation System), by making material handling changes where required, or by adjusting occupational protection requirements. This method of continual process improvement builds upon the Best Available Technology (BAT) requirements for controlling fugitive emissions, as well as worker protection requirements, monitoring requirements, etc., that were defined during the early design phase of the WPRAP.

Actions taken by the project to control emissions appear to be very successful in minimizing project contributions to the airborne radioactivity levels monitored at the Fernald Environmental Project (FEMP) property boundary. Specifically, during Calendar Year (CY) 2001 WPRAP processed approximately 122,000 tons of material while the FEMP's

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Mr. James A. Saric  
Mr. Tom Schneider

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maximum annual fenceline air inhalation dose was 0.8 mrem (8% of the NESHAP Subpart H standard). Additionally, based on the fenceline monitoring results from the first four months of CY 2002 the projected maximum annual fenceline dose for this year is approximately 1.2 mrem (approximately 12% of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart H standard). The fenceline monitoring program monitors cumulative fugitive emissions across all activities at the FEMP, and through data interpretation, project specific feedback is provided for more efficient control and management.

Since the beginning of pit excavations in 1999, WPRAP has processed a range of waste types with varying contaminant concentrations including a large quantity of raffinate materials from Pit 3 - materials that are similar to wastes contained in Pit 5. During this time, air-sampling results associated with excavation and waste hauling have shown these activities to be very minor contributors to WPRAP emissions. This is primarily due to the relatively high moisture content of the waste materials at the point of excavation and the physical properties of the waste that inhibit natural drying. The experience gained working with these materials over the past two years provides the basis for DOE to determine that a modification to the waste hauler truck tarping requirements is appropriate. DOE does not believe this request reflects a deterioration or relaxation in the requirements for controlling fugitive emissions. Rather, it provides a balanced approach for controlling fugitive emissions during waste hauling operations while providing additional flexibility to maximize productivity in the remediation effort.

DOE has revised the subject DCN to include criteria based on material properties and weather conditions under which the waste hauler trucks would not be required to tarp over the waste load in transit between the excavation and the discharge point (Enclosure). The haul trucks will be maintained with mechanized retractable tarps for use when needed.

DOE will continue to monitor and evaluate WPRAP emissions along with fenceline data collected under the Integrated Environmental Monitoring Program to assure Program objectives are not compromised.

If you have any questions or comments, please contact Dave Lojek at (513) 648-3127.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Kappa

Enclosure: As stated

JUN 10 2002

Mr. James A. Saric  
Mr. Tom Schneider

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## cc w/enclosure:

R. Greenberg, EM-31/CLOV  
N. Hallein, EM-31/CLOV  
J. Kappa, OH/FEMP  
D. Lojek, OH/FEMP  
T. Schneider, OEPA-Dayton (three copies of enclosure)  
G. Jablonowski, USEPA-V, SRF-5J  
F. Bell, ATSDR  
M. C. Wojciechowski, Tetra-Tech  
M. Shupe, HSI GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc./MS78

## cc w/o enclosure:

A. Tanner, OH/FEMP  
D. Carr, Fluor Fernald, Inc./MS2  
M. Cherry, Fluor Fernald, Inc./MS52-1  
D. Dalga, Fluor Fernald, Inc./MS52-1  
T. Hagen, Fluor Fernald, Inc./MS65-2  
T. Walsh, Fluor Fernald, Inc./MS46  
D. Zdelar-Bush, Fluor Fernald, Inc./MS52-1  
ECDC, Fluor Fernald, Inc./MS52-7

# Engineering \ Document Change Notice

IT Project No. 773481 / FDF 98SC000001		Project Name: WPRAP		PCP: n/a
Subject: WPRAP Remedial Design Package, Vol 2 of 3, Excavation Plan, Rev 0, 8/25/98				
Type of Change:		Change Class:		Change Number:
ECN	_____	Class 1	_____ (PCP Req'd)	<b>DCN 1148</b>
DCN	<u>  X  </u>	Class 2	_____ (PCP Req'd)	
		Class 3	<u>  X  </u> (Minor Mod)	
				Issue Date: <u>5/13/02</u>
				Page <u>  1  </u> of <u>  3  </u>
Reason for Change:				
<p>Observation and sampling have shown that some Waste Pit material is sufficiently moist, and the concern of fugitive dust emission from this hauled material is manageable. The requirement to use tarps on trucks should be changed to gain advantage from favorable material characteristics.</p>				
Description of Change:				
<p>The primary fugitive emission identified as a concern during excavation activities is the generation of dust from haul trucks carrying excavated materials to the process area. These potential emissions will be controlled by a number of actions including proper loading of the trucks to prevent spillage of materials during transportation, regular cleaning and maintenance of the haul roads, application of water and surfactants to prevent the suspension of dust during dry conditions and the control of truck speed during the transportation activities. The articulating dump trucks will be equipped with automatic/retractable covers over their beds. If required, the surface of each truck load could be sprayed with a water mist to help control dust generation during transport. The tires and undercarriages of haul trucks will be washed at the truck wash facility to help control the potential for dust generation. A speed limit of 15 miles per hour will be enforced for heavy equipment and all vehicles traveling within the unsurfaced excavation area to minimize the potential for dust generation.</p>				
Document Title		Document No.		Rev. No. <u>  0  </u>
<u>WPRAP RD Vol 2/3, Excavation Plan</u>		<u>C-017</u>		Rev. Date: <u>8/25/98</u>
Is this Change.....		Required Approvals:		
Safety Related _____		Permanent <u>  X  </u>		Lead Proj Engr <u>  X  </u>
Configuration _____		Temporary _____		P.E. _____
Administrative <u>  X  </u>		Expiration Date: _____		
Prepared By: SATKOSKI				Date: <u>05/13/02</u>
Approved By:  For J. Satkoski (Lead Proj. Engr.)				Date: <u>5/13/02</u>
Approved By: _____ (Designer/P.E.)				Date: _____

## Engineering \ Document Change Notice

IT Project No. 773481 / FDF 98SC000001

Project Name: WPRAP	PCP: n/a
Change Number: <b>DCN 1148</b>	Issue Date: 5/13/02
	Page <u>2</u> of <u>3</u>

Section 5.1.5 will be replaced and read as follows:

The primary fugitive emission identified as a concern during excavation activities is the generation of dust from haul trucks carrying excavated materials to the process area. These potential emissions will be controlled by a number of actions including:

- Trucks will be properly loaded to prevent spillage of materials from the trucks during transportation.
- Haul roads will be cleaned and maintained regularly.
- Water will be applied to haul roads to suppress the suspension of dust during dry conditions.
- A speed limit of 15 miles per hour will be enforced for heavy equipment and all vehicles traveling within the unsurfaced excavation area to minimize the potential for dust generation.
- The tires and undercarriages of haul trucks will be washed at the truck wash facility to help control the potential for dust generation.

Note that both sections 4.8 "Loading and Hauling" and 5.1.5 "Fugitive Emissions" already contained requirements to furnish haulers in the excavation which are equipped with "automatic/retractable covers" on the beds of the vehicles.

# Engineering \ Document Change Notice

IT Project No. 773481 / FDF 98SC000001	Project Name: WPRAP	PCP: n/a
	Change Number:	Issue Date: 5/13/02
	<b>DCN 1148</b>	Page 3 of 3

- The articulating dump trucks will be equipped with automatic/retractable covers over their beds. Potential emissions will be controlled by covering truck beds hauling excavated materials, allowing for the following exceptions:
  - (1) The hauled material is sufficiently moist to mitigate the risk of fugitive dust emissions from the material.
  - (2) The hauled material has physical characteristics which prevent the cover systems from being used safely, such as debris (concrete, piping) and will not produce dust in transit.
  - (3) Exception (1) and (2) should be reconsidered if weather conditions (excessive wind, heat, dryness) could increase the risk of fugitive dust emissions.
- If required, the surface of each truck load could be sprayed with a water mist to help control dust generation during transport.

Replacement Pages Provided (attached)

Note that both sections 4.8 "Loading and Hauling" and 5.1.5 "Fugitive Emissions" already contained requirements to furnish haulers in the excavation which are equipped with "automatic/retractable covers" on the beds of the vehicles.

### 5.1.5 Fugitive Emissions

The primary fugitive emission identified as a concern during excavation activities is the generation of dust from haul trucks carrying excavated materials to the process area. These potential emissions will be controlled by a number of actions including:

- Trucks will be properly loaded to prevent spillage of materials from the trucks during transportation.
- Haul roads will be cleaned and maintained regularly.
- Water will be applied to haul roads to suppress the suspension of dust during dry conditions.
- A speed limit of 15 miles per hour will be enforced for heavy equipment and all vehicles traveling within the unsurfaced excavation area to minimize the potential for dust generation.
- The tires and undercarriages of haul trucks will be washed at the truck wash facility to help control the potential for dust generation.
- The articulating dump trucks will be equipped with automatic/retractable covers over their beds. Potential emissions will be controlled by covering all truck beds hauling excavated materials, allowing for the following exceptions:
  - (1) The hauled material is sufficiently moist to mitigate the risk of fugitive dust emissions from the material.
  - (2) The hauled material has physical characteristics which prevent the cover systems from being used safely, such as debris (concrete, piping) and will not produce dust in transit.
  - (3) Exceptions (1) and (2) should be reconsidered if weather conditions (excessive wind, heat, dryness) could increase the risk of fugitive dust emissions.
- If required, the surface of each truck load could be sprayed with a water mist to help control dust generation during transport.

**5.2 Dust Monitoring Methods**

Sampling of ambient air monitoring will be performed to evaluate dust levels if determined to be necessary by the site SHSO. Monitoring for dust will be performed visually. It will be the responsibility of each IT employee to observe his work area for the potential and/or actual generation of dust. Any dust condition will be reported to the supervisor, foreman, or group leader in the work area who will arrange for immediate wetting of the area or implementation of other measures necessary to control the dust. If necessary, the work activities will be minimized or stopped in that area until dust emissions are controlled. IT will work cooperatively with those FDF personnel who routinely patrol the site to identify and correct dust nuisance hazards.