



Department of Energy  
Ohio Field Office  
Fernald Environmental Management Project  
P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



5107

OCT 27 2003

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SR-6J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0023-04

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

Mr. Pete Sturdevant  
Compliance Specialist  
Air Quality Management Division  
Hamilton County Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 456218-2660

Dear Mr. Saric, Mr. Schneider, and Mr. Sturdevant:

**QUARTERLY REPORT ON DRYER STACK, OCTOBER 2003**

The purpose of this letter is to transmit the Quarterly Report on Dryer Stack for the Waste Pit Project (WPP) at the Fernald Closure Project (FCP) to the United States Environmental Protection Agency (USEPA), the Ohio Environmental Protection Agency (OEPA), and the Hamilton County Department of Environmental Services (DOES).

In response to the OEPA comments on the Draft Remedial Action Package, the DOE-FCP, Fluor Fernald, Inc., and Shaw Environmental, Inc. agreed to provide quarterly reports of any deviations or excursions from emissions limitations, operational restrictions, and control device operating parameter limitations for the dryer stack. If no deviations or excursions occurred during the affected calendar quarter, a report stating so is required.

The information contained in this letter and the enclosure satisfies the commitment for Calendar Quarter July 1 through September 30, 2003. Specifically, there are two incidents to report for the time period. The information was reported to the DOES, via electronic mail. A copy of the electronic mail report is enclosed.

5107

OCT 27 2003

DOE-0023-04

Mr. James A. Saric  
Mr. Tom Schneider  
Mr. Peter Sturdevant

-2-

No additional deviations or excursions occurred during the referenced time period.

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

Sincerely,



Glenn Griffiths  
Acting Director

FCP:Lojek

Enclosure: As Stated

cc w/enclosure:

N. Hallein, EM-31/CLOV  
D. Lojek, OH/FCP  
T. Schneider, OEPA-Dayton (three copies of enclosure)  
G. Jablonowski, USEPA-V, SR-6J  
F. Bell, ATSDR  
M. Cullerton, Tetra-Tech  
M. Shupe, HSI GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:

R. Greenberg, EM-31/CLOV  
K. Johnson, OH/FCP  
D. Carr, Fluor Fernald, Inc./MS1  
M. Cherry, Fluor Fernald, Inc./MS52-1  
T. Hagen, Fluor Fernald, Inc./MS1  
T. Walsh, Fluor Fernald, Inc./MS52-3  
ECDC, Fluor Fernald, Inc./MS52-7

2

From: Shanks, Pat  
To: Peter.Sturdevant@does.hamilton-co.org  
Cc: Saric.James@epa.gov; Tom.Schneider@epa.state.oh.us;  
Bill.Lohner@epa.state.oh.us; Carr, Dennis; Jewett, Marc; Spotts, Phil; Poff,  
Timothy; Zdelar-Bush, Diane; Couch, Mark; Cherry, Mark; Dalga, Dennis;  
Desormeau, Joe; Reising, Johnny; Lojek, Dave; Skintik, Ed; Limerick, Phil;  
Philpot, Paul; Yaeger, Daniel

Subject: Notification of OEPA- Malfunction of Thermal Oxidizer at WPRAP on 7/21/03

Mr. Sturdevant

Pursuant to OAC 3745-15-06, this e-mail message serves as a notification to OEPA of a malfunction that occurred at WPRAP. On 7/21/03 at 0741 hours, a power outage occurred at WPRAP. The power outage interrupted power to the Dryer and the off-gas system. The power outage lasted only 3 minutes. After power was restored at 0744 hours, the burners to the Dryers were re-lit at 0845 hours and feed to both Dryers resumed at 1245 hours.

The WPRAP emergency safety systems performed as designed during the power outage which included the shut down of feed to the Dryers and the shut down of the burners to both the Thermal Oxidizer (TO) and the Dryers. Prior to the power outage, Pit 5 material was being fed to both Dryers. During the 3 minutes that power was not available at WPRAP, steam was observed being released from both Dryers. The steam release halted once power was restored at WPRAP and the ID Fan for the off-gas system started operating again. Also, at the start of the power outage, a yellow plume was observed being released from the off-gas stack. This yellow plume was visible until the burners to the Thermal Oxidizer were re-lit, which was at 0750 hours on 7/21/03.

The steam release from the Dryers is considered minimal because the release lasted only 3 minutes and the volume of the release was not great. The yellow plume release from the off-gas stack is considered minimal because: 1) the yellow plume was only visible for 9 minutes; 2) for 6 of the 9 minutes, the off-gas system was operating except for the TO so the only potential emissions from the exhaust stack during this time were organics and carbon monoxide; 3) the scrubber would remove some of the organics from the off-gas stream; 4) feed to the Dryers was suspended so the pit material inside the Dryers became less as time elapsed, thereby reducing emissions from the Dryers; and 5) the Dryers were cooling down which would also cause emissions from the Dryers to be reduced as time elapsed.

This incident is being reported to OEPA due to the fact that the TO was not operating while waste pit materials were being processed inside the Dryers. The TO is considered Best Available Technology for organics and carbon monoxide emissions from the Dryers and must be in operation whenever waste pit materials are being processed inside the Dryers.

If you have any question, please contact me at 513-648-4203 or send an e-mail message.

Pat Shanks  
Fernald Closure Project

From: Shanks, Pat  
To: Peter.Sturdevant@does.hamilton-co.org  
Cc: Saric.James@epa.gov; Tom.Schneider@epa.state.oh.us;  
Bill.Lohner@epa.state.oh.us; Carr, Dennis; Jewett, Marc; Spotts, Phil; Poff, Timothy;  
Cherry, Mark; Dalga, Dennis; Zdelar-Bush, Diane; Desormeau, Joe; Lojek, Dave;  
Skintik, Ed; Limerick, Phil; Couch, Mark; Philpot, Paul; Yaeger, Daniel

Subject: Notification of OEPA- Malfunction of Thermal Oxidizer at WPRAP on 7/6/03

Mr. Sturdevant

Pursuant to OAC 3745-15-06, this e-mail message serves as a notification to OEPA of a malfunction that occurred at WPRAP. On 7/6/03 at 0852 hours, a sitewide power outage occurred at the Fernald Closure Project (FCP), which included power to WPRAP. The power outage interrupted power to the Dryer and the off-gas system. The WPRAP emergency safety systems performed as designed during the power outage which included the immediate start-up of the emergency generator, the shut down of feed to the Dryers, and the shut down of the burners to both the Thermal Oxidizer (TO) and the Dryers. Prior to the power outage, Pit 5 material was being fed to both Dryers.

The emergency generator started up at approximately 0855 hours on 7/6/03. The emergency generator provided backup power to WPRAP which included power to the off-gas system. During the 3 minutes that the off-gas system was not operating, steam was observed being released from both Dryers. The steam release halted once the ID Fan for the off-gas system started operating again. The emergency generator continued to operate until power was restored at WPRAP which was 2300 hours on 7/6/03.

While the emergency generator was operating, the burners to the TO and the Dryers remained shut down. The generator did provide power to the Dryers so they could be emptied. While the Dryers were being emptied, a yellow plume was observed being emitted from the off-gas stack. The yellow plume was observed just after 0852 hours until 0920 hours on 7/6/03. Once power was restored at WPRAP, the burners to the Dryers and the TO were relit. The burners to the TO were relit at 0435 hours on 7/7/03 and the burners to the Dryers were relit at 0500 hours on 7/7/03. Feed to both Dryers was resumed at 1130 hours on 7/7/03.

The steam release from the Dryers is considered insignificant because the release lasted only 3 minutes and the volume of the release was not great. The yellow plume release from the off-gas stack during the time the Dryers were being emptied is considered minimal because: 1) feed to the Dryers was suspended so the pit material inside the Dryers became less as time elapsed, thereby reducing emissions from the Dryers; 2) the Dryers were cooling down which would also cause emissions from the Dryers to be reduced as time elapsed; 3) the only potential emissions from the exhaust stack were organics and carbon monoxide while the TO was shut down; 4) the scrubber would remove some of the organics from the off-gas stream; and 5) the yellow plume was only observed emanating from the exhaust stack for at the most 28 minutes.

This incident is being reported to OEPA due to the fact that the TO was not operating while the ID Fan was ventilating the Dryers while waste pit materials were being processed inside the Dryers. The TO is considered Best Available Technology for organics and carbon monoxide emissions from the Dryers and must be in operation whenever waste pit materials are being processed inside the Dryers.

If you have any question, please contact me at 513-648-4203 or send an e-mail message.

Pat Shanks  
Fernald Closure Project