

**5472**

**WASTE PIT BERMS**

**04/12/91**

**DOE-FSO/EPA  
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LETTER  
OU1**



**Department of Energy**

**FMPC Site Office**  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705  
(513) 738-6319

**5472**

**APR 12 1991**  
DOE-1099-91

Ms. Catherine A. McCord  
Remedial Project Manager  
U. S. Environmental Protection Agency  
Region V - 5HR-12  
230 South Dearborn Street  
Chicago, IL 60604

Mr. Graham E. Mitchell, DOE Coordinator  
Ohio Environmental Protection Agency  
40 South Main Street  
Dayton, Ohio 45402

Dear Mr. McCord and Mr. Mitchell:

**WASTE PIT BERMS**

Reference: Letter, DOE-1003-91, J. R. Craig to C. A. McCord & G. E. Mitchell,  
"Waste Pit Berms" dated March 27, 1991

This letter transmits the enclosures that were to be included in the  
referenced letter. If you have any questions, please call Oba Vincent at  
(513) 738-6937 or FTS 774-6937.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack R. Craig".

Jack R. Craig  
FMPC Remedial Action  
Project Director

FSO:Vincent

Enclosures: As stated

cc w/encl.:

R. P. Whitfield, EM-40, FORS  
K. A. Hayes, EM-422, GTN  
G. E. Mitchell, OEPA-Dayton  
L. August, GeoTrans  
K. Davidson, OEPA-Columbus  
M. Bulter, SCS-TUB-3, USEPA-V  
J. Benetti, SAR-26, USEPA-V  
E. Schuessler, PRC  
R. L. Glenn, Parsons  
W. H. Britton, WMCO  
S. W. Coyle, WMCO  
H. F. Daugherty, WMCO  
J. D. Wood, ASI  
A. R. Files

cc w/o encl.:

J. J. Fiore, EM-42, GTN  
W. E. Muno, SHR-13, USEPA-V  
D. A. Ullrich, SH-12, USEPA-V

6120 South Gilmore Road  
Fairfield Executive Center  
Fairfield, OH 45014  
(513) 870-0300  
FAX (513) 870-0444

February 20, 1991

DC No. 01LD02209101  
P-M-OUI-007

Mr. Wayne Pasko  
ERA Project Manager  
U. S. DOE  
P. O. Box 398705  
Cincinnati, Ohio 45239-8705

Subject: Environmental Remedial Action Project  
Contract No. DE-AC05-900R21951  
Site Inspection Memo for Waste Pit 5 Dike

Reference: Waste Pit Dike Evaluation - Project Order 11

Dear Mr. Pasko:

As required in the referenced Project Order, attached is the Site Inspection Memo resulting from a site inspection conducted on December 13, 1990. As indicated in the attached memo, based upon the cursory inspection conducted on December 13, 1990, there was no visual evidence of seepage or berm failure. Based upon this preliminary information, it was concluded that immediate action need not be taken. A soils investigation and analysis is required to develop a more definitive conclusion. This information was provided verbally by PARSONS on December 21, 1990 and in the December PARSONS ERA Monthly Status Report.

The field inspection of Pit 5 dike was conducted by Mr. Scott Versluis, Manager of Earth Sciences and Geotechnical Engineering for the PARSONS ERA Project. He has over seventeen years experience in conducting and directing investigations in civil and geotechnical engineering. Mr. Versluis holds two degrees in Civil Engineering, with his graduate work specializing in soil mechanics and geotechnical engineering.

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Mr. Wayne Pasko  
February 20, 1991  
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If you require any additional information, please do not hesitate to contact me.

Very truly yours,  
PARSONS

  
Scott Mallette  
OU #1 Manager

SM/ah

Attachment

cc: S. Versluis  
I. Diggs - WMCO  
DC Code 19

SMGWP.057



**From:** W.A. Bowman  
**Date:** January 3, 1991  
**Subject:** FIELD OBSERVATION AT WASTE PIT #5

WMCO:CP:OU1:91-001

**To:** I.W. Diggs

Upon receiving verbal information from Oba Vincent of the FMPC-DOE Site Office on 12/21/90 concerning recent land deformations to the earthen berm surrounding Waste Pit #5, a field inspection of the berm was conducted. Oba communicated that his concern was fueled by sightings he made during the recent Waste Pit #6 Removal Action activities (between 12/17 and 12/19/90) and the potential for further soil sloughage due to the recent heavy rainfall.

Leroy Pennington, Manager, Utilities, was summoned and accompanied me on the tour of inspection. The fenced-in section of the CSX rail-spur was paced-off from the access road south of the Borrow Pit (in the northwest corner of the site) eastward toward the Production Area. This particular approach gave the most direct vantage from which to visually survey the berm and its contiguous embankment.

Following are observations made of the current condition of the north berm of Waste Pit #5:

- The profile of the fence-line along the berm crest is noticeably dislocated and is leaning northward, suggesting that the surrounding soil support for the fencepost-footers has diminished due to significant changes in the underlying substrate;
- Upon entering the secured section of rail-spur, it was immediately observed that the TSS (Total Suspended Solids) present in the runoff water in the nearby drainage ditch appeared high, possibly signifying that soil erosion is occurring at some point(s) upgradient of the drainage flow;
- The most likely source of the TSS in the berm drainage area appeared to be the unfoliated, back-fill soil used for the base and accessway for Monitor Well #1080 which is situated approximately midway along Pit #5's northern margin;
- Another potential source of recently mobilized soil evident in the drainage ditch TSS may be the several burrows which have been dug into the eastern end of the berm by colonizing woodchucks or common groundhogs (*Marmota monax*) which are a common FMPC inhabitant.

I.W. Diggs

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WMCO:CP:OU1-91-001

No observation was made at this time which would warrant a full-scale emergency response; however, several pulled seams and loose patches have been located on the pit liner above the water line (see WMCO:O:(UT):90-87) which may indicate deeper problems necessitating immediate maintenance attention. It may also be prudent to recommend further consideration about encouraging the woodchucks in the Pit #5 area to relocate elsewhere on the site. Several less-than-lethal methods are available which may assist us in a solution to this particular problem. Their continued and increased presence in the berm will not increase its structural integrity. As a fact, if their population increases over the next few breeding seasons (particularly in the relative absence of large predatory carnivorous mammals or birds), the existing berm could become so densely populated by these mammals that deep honey-combing and eventually large-scale collapse of the existing built-up structure may be witnessed.

For further discussion of the observations made, please contact extension 8909.

Sincerely,

*Wm A. Bowman*

William A. Bowman

WAB:wab

c: O. Vincent  
L. Pennington  
P. Hopper  
D. Carr  
J.T. Grumski  
L. England  
E. Savage