



State of Ohio Environmental Protection Agency

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George V. Voinovich
Governor

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July 31, 1998

RE: DOE FEMP
DRAFT FINAL WPRAP REMEDIAL
DESIGN PACKAGE

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Dear Mr. Reising:

Ohio EPA has reviewed DOE's June 4, 1998 submittal, "Transmittal of Draft Final Remedial Design Documents Package for Operable Unit 1 and Responses to USEPA and Ohio EPA Comments" and July 17, 1998 submittal, "Transmittal of Revised Responses to Ohio EPA Comments on the Draft Final Remedial Design Documents." Based upon this review Ohio EPA conditionally approves the initiation of construction activities for OU1 treatment facilities. This approval specifically excludes any treatment or excavation of OU1 waste material. The conditions of the approval include acceptable incorporation of the attached comments into a revised Final Remedial Design Document.

If you have any questions, please contact Tom Ontko or me.

Sincerely,

for

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

- cc: Jim Saric, U.S. EPA
- Terry Hagen, FDF
- Ruth Vandergrift, ODH
- Mark Shupe, HSI- GeoTrans, Inc.
- Francie Barker, Tetra Tech EM Inc.

Manager, TPSS/DERR,CO

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Ohio Environmental Protection Agency comments on the
Draft Final Waste Pits Remedial Action Project
Remedial Design Package

General Comments

- 1) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Comment: Obviously, Ohio EPA is concerned with DOE's proposed uncontrolled release of radon from the OU1 treatment system. However, we understand the technical implications of adding radon treatment via carbon absorption. Considering the cleanup objectives of the site, the limited duration of operations and the expected release rates, Ohio EPA concurs with DOE's proposal to not treat radon with the following requirement: DOE will use the following administrative control limits for release of radon from OU1 operations: maximum hourly limit of 0.013 Ci/hr and a maximum annual release of 27 Ci/yr. Should the facility exceed either of these limits, DOE will initiate an immediate design/operations review to evaluate options for reducing radon emissions. Considering the facility design/operation assumed these emissions rates and Ohio EPA's concurrence with the design/operation was based upon them, we believe it is only prudent to re-evaluate the design/operation if these release rates are exceeded.
- 2) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Comment: Regarding DOE's 7/17/98 responses, Ohio EPA understands DOE's concerns regarding project specific high volume air monitoring for the Waste Pits Remedial Action Project as well as the substantial amount of health and safety monitoring that will occur. We continue to believe though, that project specific air monitoring will benefit the project, environment and public. Ohio EPA has considered DOE's proposal for us to conduct the high volume air sampling. In a compromise we believe will be acceptable to all parties, Ohio EPA will conduct sampling at former locations AMS-17 and AMS-19, while DOE would conduct sampling a former locations AMS-20 and AMS-18. Ohio EPA believes this proposal will result in the two agencies working together on data evaluation while presenting the least burdensome sampling approach for all parties involved. Details regarding sample parameters, reporting, etc should be resolved between DOE and Ohio EPA with sufficient time to allow sampling start up prior to any excavation.
- 3) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Comment: Ohio EPA requested, during our 7/2/98 meeting, that DOE submit detailed and comprehensive air dispersion models indicating the locations of maximum ground level concentrations (MGLCs) for radon-222 and particulates. The dispersion model should include the two highest MGLC locations on the FEMP fenceline for each parameter, as well as, any MGLC locations on site. Ohio EPA believes that the results of the modeling can be used as a tool to allow DOE and Ohio EPA to chose the best possible locations for the radon and

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particulate samplers.

- 4) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code: c
 Comment: At the 6/9/98 meeting reviewing DOE RtC on this design package, DOE stated that a 3 Ci/hr stack limit for the release of radon would result in a 0.5 pCi/L increase in radon concentration at the fenceline. Further, it was stated that an incremental increase of 0.5 pCi/L at the fenceline would result in less than 0.5 mrem/yr dose (see DOE's 7/17/98 RtC letter). The dose estimate appears to be in error. The Site Environmental Reports from 1993 through 1996 state that fenceline concentrations ranging from 0.5 to 1.0 pCi/L result in doses in the 400 to 500 mrem/yr range. Ohio EPA requests that a comprehensive dose estimate based on releases of radon from the stack and fugitive radon emissions from the waste pits be performed. The dose estimate methodology should be consistent with the methodology used in the SER.
- 5) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code: general
 Comment: These comments address the excavation strategies for the Clearwell and Waste Pit No. 3.
1. During the last part of neat line excavation, i.e. the removal of the liner and the underlying one foot of native materials, the excavation should be graded to drain water away from the excavation face.
 2. During directed excavation, drainage and berms should be maintained to minimize water infiltration.
- 6) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code: general
 Comment: This comments addresses excavation of Waste Pit Nos. 1, 2, 4, 5 and 6. During directed excavation in the glacial tills, berms and grading should be maintained to minimize infiltration.
- 7) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code:
 Comment : A hydrogeologist from the AR&WWT Project with extensive on-site experience should be empowered to make the field decisions regarding the location and existence of the various strata encountered during excavations. He/she should be present when excavations are within three feet of as-built liner elevations in Waste Pit No. 3 and the Clearwell and especially when sumps are dug in these locations. This geologist should determine when the various strata have been encountered. That is, he/she should make the determination where the pit waste/compacted liner interface occurs, the clay liner to till interface, the till/unsaturated GMA

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interface, etc.

- 8) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code:
 Comment: It is Ohio EPAs expectation that the design of the directed excavations will be a continuation of the IRDP processes currently being used in the SCEP.

Responses to Comments

- 9) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Pg #: Line #: Code:
 Original Comment #: 14
 Comment: The response to this comment is that "Stormwater controls for storage piles for pre-operational activities were addressed in section 3.2 of the Site Preparation Package. Stormwater controls for storage piles for the operational activities (i.e., waste excavation and drying) were given in Table 3-2c of the Design Criteria and Assumptions section and will be further addressed in the Operational Environmental Control Plan which will be provided as part of the future RA Documents Package". Section 3.2 of the Site Preparation Package states that "Stockpiles will be managed with appropriate run-on/runoff and dust suppression controls". This does not adequately address erosion, sediment and storm water. Table 3-2c of the Design Criteria and Assumptions section is the RCRA Substantive Permitting Requirements and address RCRA waste stock piles. The Description of Operation and Processes section covered most aspects of storm water control except specifically how erosion, sediment and storm water on storage piles would be handled. The action taken in response to this comment is adequate. The new section (2.8.6) of the Description of Operation and Processes is appropriately located and addresses specifically the controls that will be used for storage piles. However, this section states that "Management control of storm water which falls on storage piles during the facility construction period is addressed in section 6.1 of the Pre-Operational Environmental Control Plan.", but section 6.1 of the Pre-Operational Environmental Control Plan describes where water will flow and that some will flow into the SWM pond in the northeast portion of the area, not how controls for storage piles will be installed and maintained. Section 6.5.2 of the Pre-Operational Environmental Control Plan does state that "To the extent practical and necessary, open excavations and exposed materials that would add to sedimentation concerns would be covered". This is a more appropriate description of controls that would be used on storage piles than that found in section 6.1. Additionally the control of sheet flow through the installation of silt fence as described in the new section 2.8.6 of the Description of Operation and Processes could be included. The response and action refer to the Operational Environmental Control Plan which will be provided as part of the future RA Documents package and the WPRAP SWMP

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respectively. Are these the same document?

- 10) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Pg #: Line #: Code:
 Original Comment #: 42 and 46
 Comment: This section of the WPRAP describes the project specific sampling and analysis to be conducted. It is agreed that the noncontact storm water sampling at the SWM pond is a point source to Paddys Run. However the plan describes other flow paths of noncontact storm water to Paddys Run. Deferring sampling of these other routes of flow to the IEMP sampling is not sufficient. It is incumbent upon the project to demonstrate that remedial activities are not causing undue releases of contaminants outside the project boundaries. The IEMP monitors collective environmental impacts, each remediation project will continue to be responsible for the design and execution of its own monitoring activities to demonstrate compliance with respective project specific ARARs and to obtain the necessary immediate feedback required to track the effectiveness of these controls (from section 1.3 of the IEMP). Ohio EPA expects the project to be able to demonstrate that the noncontact runoff from the project has contaminant levels below FRLs and BTVs.
- 11) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Pg #: Line #: Code:
 Original Comment #: 50
 Comment: It is agreed that the OMMP describes site wide flows to the BSL and the hierarchy of shutdown decisions. The OMMP gives the BSL the highest treatment priority. The concern of Ohio EPA is that, even though the BSL has the highest priority, shutdowns to the BSL currently result in overflows in OU1 to the swale. With additional volume being generated in OU1 and the OSDF as indicated in the original comment, Ohio EPA sees the potential for increased overflows to occur. This has not been adequately addressed. At a minimum, Ohio EPA expects the issue to be addressed through the Wastewater Integration Committee (WWIC) (section 7.2 of the OMMP) and an issue/resolution summary sheet to be included as part of the WPRAP. Resolution of these outstanding waste water issues at the BSL must be resolved prior to any operation of the OU1 facilities or excavation activities.