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COMMENTS INTERMEDIATE OSDF DESIGN PACKAGE

05/29/96

OEPA
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OU2

DOE-FN



State of Ohio Environmental Protection Agency

Southwest District Office

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LOG J-2061
MAY 29 9 29 AM '96

George V. Voinovich
Governor

May 29, 1996

RE: FILE
DOE KEMP
MSL 531-0297
HAMILTON COUNTY
COMMENTS INTERMEDIATE
OSDF DESIGN PACKAGE

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

Dear Mr. Reising:

This letter provides as an attachment Ohio EPA's comments on the Intermediate Design Package and the Remedial Action Work Plan and Support Plans for the On-Site Disposal Facility. This package was received by the Ohio EPA on April 10, 1996. This package was also reviewed by the Ohio Department of Health (ODH) Bureau of Radiation Protection. The comments from ODH have been incorporated in the attachment. Although we agree that the level of detail is typical of a 90% regulatory submittal, we anticipate reviewing this material again as a 90% design package.

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

Sincerely,

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

cc: Jim Saric, U.S. EPA
Terry Hagen, FERMCO
Ruth Vandergrift, ODH
Mike Proffitt, DD&GW
Sharon McLellan, PRC
Manager, TPSS/DERR, CO
Dave Ward, GeoTrans

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partial
action response
to p-0726 (DOE-0771-96)
(9734)

**Ohio Environmental Protection Agency Comments Intermediate Design Package On-Site
Disposal Facility**

General Comments

Commenting Organization: Ohio EPA

Commentor: ODH

Section #:

Pg. #:

Line #:

Code: C

Original Comment # 1

Comment: While conservative modeling predicts very low concentrations of airborne particulate radionuclides offsite to the nearest receptor, this may not be so for the remediation workers. As the on-site remediation workers will incur the greatest risk during placement of impacted materials, are there any planned enhancements to the current occupational radiological program for required monitoring, action levels, and possible internal uptakes or external exposures? If this information appears in a Project Specific Health & Safety Plan, ODH requests this once available.

Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: Preliminary design RTC Comment # 27

Code: C

Original Comment # 2

Comment: The Ohio EPA concurs with DOE's response to provide digital copies of the drawings and maps as requested in the Ohio EPA preliminary design package. However, the request to maintain these files as business sensitive is rather vague and may be in conflict with Ohio law regarding public access to the records kept by the State of Ohio. It is not Ohio EPA's intention to disseminate the contents of these files to any third party, but there may exist no legal means whereby Ohio can withhold these documents if there is a bona fide request to view them.

Ohio EPA copies these drawings upon receipt to the hard drive of our GIS computer and maintains the submitted files as backups. It is our intention to maintain copies of the various phases of design in order to understand the evolution of the design. Returning the original would inhibit our ability to archive the electronic design files. In some cases files are FTPed to Ohio EPA. In these cases there are no storage media to return to DOE. Rather than an exchange of verbal comments, this matter may be more readily resolved in the meeting scheduled for May 28, 1996 at the Fernald site.

Permitting Plan and Substantive Requirements

Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: 3.3

Pg. #: 3-2

Line #: 36

Code: C

Original Comment # 3

Comment: Please repeat the referenced schedule here.

Ohio EPA comments, 60% OSDF design
Page 2

Borrow Area Management and Restoration Plan

Commenting Organization: Ohio EPA
Section #: Appendix B Pg. #: Table 5 Line #: Code: C
Original Comment # 4

Commentor: OFFO

Comment: The stakeholders should be consulted before a final decision is made on types of grasses to be used for the permanent vegetative cover. Recommendations from the Fernald Citizens Task Force and the Community Re-use Organization may dictate the types of vegetation that are needed.

Impacted Material Placement Plan

Commenting Organization: Ohio EPA
Section #: Pg. #: Line #: Code: major
Original Comment # 5

Commentor: OFFO

Comment: The Ohio EPA continues to have serious concerns with the disposal of large blocks of concrete in the OSDF. These concerns may be summarized as follows:

- the possibility that these materials may be reused as aggregate in the construction of remedial facilities such as roads,
- the scheduling difficulties of meeting the necessary soil to debris ratio and the possible double-handling that would result from stockpiling concrete during "soil-poor" periods,
- the difficulty of both compacting around the large slabs and verifying that compaction has been successfully achieved, and
- the existence of proven technology to crush concrete to a soil-like material that can be compacted.

Commenting Organization: Ohio EPA
Section #: Pg. #: Line #: Code: major
Original Comment # 6

Commentor: OFFO

Comment: It has recently come to Ohio EPAs attention that there are some emerging technologies that show promise to chemically destroy asbestos fibers including transite. It is Ohio EPAs expectation that these technologies will be evaluated for the transite from OU3.

Commenting Organization: Ohio EPA
Section #: 2.2 Pg. #: 2-1 Line #: 22 Code: C
Original Comment # 7

Commentor: OFFO

Comment: The citation for the Ohio Administrative Code applies to existing sources of air pollution. The correct citation for new sources is OAC 3745-31-05(A)(3) which requires "best available technology"(BAT). OAC 3745-17-12(C)(1) provides a summary of BAT requirements.

Commenting Organization: Ohio EPA
Commentor: OFFO

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Section #: 4.3 Pg. #: 4-3 Line #: 32 Code: C
Original Comment # 8
Comment: Please delete all references to tires in the Impacted Materials Placement Plan. Tires are banned from land disposal in Ohio.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.9 Pg. #: 6-9 Line #: 35 Code: C
Original Comment # 9
Comment: There is no Figure 6-3.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 7.2, 7.3, 7.4 Pg. #: 7-2 Line #: 16 Code: C
Original Comment # 10
Comment: Discuss the implications of requiring that the compaction layer be within +/-2 percent of the optimal moisture content. The moisture specifications for liner materials are 2 per cent wetter than optimal because the working of the liner materials during compaction will tend to dry them somewhat. Why isn't this reasoning applied to the placement of the protective and contouring layers in this section and the placement of select impacted material in section 7.3 and the placement of Category 1 material in section 7.4. In the case of Category 1 material, the moisture content is allowed to be even dryer at +/- 4 per cent of optimum.

Specification Package Comments

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: Specifications-General Pg. #: Line #: Code: C
Original Comment # 11
Comment: Please include a Table of Contents with this document, listing the title of each section for ease of reference.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: General Pg. #: Line #: Code: C
Original Comment # 12
Comment: Some aspects of this design package appear to be less complete than the preliminary design package. Specifically, the civil drawings and the mechanical drawings relating to the LCS, LDS, and the liner and cover designs. The number of civil drawings has significantly decreased. Additionally, many referenced specifications have not been included in the specification package.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: Pg. #: Line #: Code: C
Original Comment # 13

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Comment: A number of models are used to predict the OSDF design parameters (HydroCAD, HELP, XSTABL, Shake91, YSLIP_C, Landfill Air Emissions Estimation Model and RAECOM). The text needs to include a discussion of the model assumptions and to what extent the site specific data conform to those assumptions. This review will enable the evaluation of the models' applicability to the OSDF design.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section#: **Pg. #:** **Line#:** **Code:** C
Original Comment # 14

Comment: The calculation of the volume of soil expected for staging in the borrow area is not included. It is understood that the volume of soils in excess of the Waste Acceptance Criteria (WAC) is to be determined in the near future based on the soil sampling program. However, it is important to note that once the final determination has been made, a re-calculation of the appropriate size of the borrow area may be necessary. The inclusion of the calculation of the estimated area required in the document will be a useful reminder and "place holder" until the actual calculation is demonstrated.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section #: 02220 **Pg. #:** 02220-7 **Line #:** 32 **Code:** C
Original Comment # 15

Comment: A reference is made to Specification 2210, which is not included in this package. Please include this specification.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section #: 02225 **Pg. #:** 02225-9 **Line #:** 2 **Code:** E
Original Comment # 16

Comment: Reference to repair of desiccation cracking should be Part 3.09 of this section. The reference given is part 3.07 of this section.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section #: 02214 **Pg. #:** 02714-8 **Line #:** 3 **Code:** C
Original Comment # 17

Comment: A reference is made to Specification 2215, which is not included in this package. Please include this specification.

Drawings Comments

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Drawing #: 90X-6000-G-00018 **Sheet #:** G-18 Detail # **Code:** C
Original Comment # 18

Ohio EPA comments, 60% OSDF design

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Comment: Specification 13010 is referenced on this drawing. Please include Specification 13010 in the specification package.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Drawing #: 90X-6000-G-00024 Sheet #: G-24 Sections B, C, and D Code: C
 Original Comment # 19

Comment: Please make a note explaining the composition of the pipe embedment. Ideally, this material should be a low permeability material, possibly a continuation of the three foot thick compacted clay layer that makes up the bottom layer of the landfill proper. If the gravity pipe was embedded in a compacted clay material, leachate will be contained when the pipe fails.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Drawing #: 90X-6000-M-00002 Sheet #: M-2 Detail # Code: C
 Original Comment # 20

Comment: LT 101 through LT 901 in the LDS are shown on this piping and instrumentation diagram. These are not shown on any of the LDS manhole details on Sheets M-4 and M-5. Please include these level transmitters in the details.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Drawing #: 90X-6000-M-00006 Sheet #: M-5 Sections A, B, and C Code: C
 Original Comment # 21

Comment: The manhole embedment fill references Note 6, which references specifications 2215 and 2605. Neither of these specifications are included in the specifications document. Is this material a low permeability material. This would add an element of secondary containment to the manholes.

Calculations Package Comments

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: 7.1 Executive Summary Pg. #: 2 of 2 Line #: Code: C
 Original Comment # 22

Comment: We agree that the leachate will maintain a degree of saturation in the impacted material, however much of the leachate will drain. This will be a function of the saturation-suction relationship of the impacted material. Since there is a capillary break at the drainage layer in the bottom of the landfill, the pressure will be atmospheric at this point. It is doubtful that a the impacted material will maintain a saturated capillary fringe above this capillary break which is 30 feet thick! For most soil types, the capillary fringe is on the order of a foot thick or less. It is probable that the moisture content will be reduced by capillary suction to its residual saturation level (which is usually in the range of 10 to 30% saturation)

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within five to ten feet of the bottom of the landfill. Without characterization of the impacted material to develop the saturation-suction relationship, it is hard to predict exactly how much leachate will drain. The rate at which this material will drain is also an unknown factor. We believe the "back of the envelope" calculation provided in the original Comment # 41 is reasonable and some contingency for this volume of leachate should be made.

Commenting Organization: Commentor:
Section #: Section 1.3, Selected Technical References Pg. #: Line #: Code: C
Original Comment # 23

Comment: The article by Bonaparte et al provides documentation for the shear strength properties assigned to reinforced and unreinforced GCL's and answers comments on the Preliminary Design Package. The Ohio EPA cautions, however, that the shear strength of reinforced GCL's deteriorates at high shear deformations (corresponding chiefly to breakdown of the reinforcement). Thus the effective shear strength of a reinforced GCL, during the initial short-term construction period, should be evaluated in view of the loads and deformations encountered during that period. So long as the critical deformations for breakdown are not exceeded, the design shear angle of 30 degrees may be safely used.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 2.1 Calculation Package Pg. #: 8 of 15 Line #: Code: c
Original Comment # 24

Comment: The maximum dry density should be presented in the table on the lower part of this page. For example, the disturbed maximum dry density of depth 5.5 to 10.5 seems to be in excess of the undisturbed dry density.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 2.2 Calculation Package Pg. #: 4 of 16 Line #: Code: c
Original Comment # 25

Comment: The calculation of the slope of L6 should be verified. Our review indicates that the slope of L6 shown is not equal to the slope calculated from the measurement of height and width. According to the slope shown in the figure, the ratio between height and width is 1 to 6. However, by calculating the ratio using the reported H5 and W6, the ratio is almost 1 to 5. If this discrepancy affects other calculations, revisions should be performed.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 3.5 Calculation Package Pg. #: 1 of 11 Line #: Code: c
Original Comment # 26

Comment: The last sentence of this page states that a final cover system with a 5H:1V slope

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Section#: 9.2 Calculation Package Pg. #: 2 of 2-LDS Code: c
Original Comment # 32

Comment: The LDS drainage corridor in active operation conditions and post-closure conditions have very high safety factors (53,400 and 14,000,000) for flow capacity. While it is understood that there are construction and logistical problems with designing the drainage corridor (i.e. to equal the safety factors of 3 and 10, the width and height would be too small to construct), there does seem to be some over-design.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 9.4 Calculation Package Pg. #:1 of 1-LDS pipe design Code: c
Original Comment # 33

Comment: Our calculation of the flow capacity for the active operation and the post-closure conditions result in safety factors of 4.48×10^6 and 1.50×10^8 respectively. These values are much higher than the required and reported safety factor values of 3 and 10. While it is understood that there are construction and logistical problems with designing the flow capacity (i.e. to equal the safety factors of 3 and 10, the piping would be too small to work with), there does seem to be some over-design of the LDS pipe.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 10.3 Calculation Package Pg. #: 5 of 34 Line#: Code: c
Original Comment # 34

Comment: With regard to the LTS temporary lift station and manhole design: the temporary lift station should include equipment with a high level/alarm to inform the system operator with the possibility of over-fill.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 14.2 Calculation Package Pg. #: 12 of 19 Line#: Code: c
Original Comment # 35

Comment: With regard to the potable water supply for the construction administration area design requirements calculation procedure, the water for dust control haul road control is calculated to be 54 GPM rather than 70 GPM.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 14.2 Calculation Package Pg. #: 1 of 9 Line#: Code: c
Original Comment # 36

Comment: With regard to the potable water supply for the construction administration area design requirements data verification, the K value for 4"/2" reducer should be 0.065 and the K value for 2"/1.5" reducer should be 0.055.

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Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 14.2 Calculation Package Pg. #: 5 of 8 Line#: Code: c
Original Comment # 37

Comment: With regard to the potable water supply for the construction administration area: the fire protection primary water supply at the west side of the construction administration area should supply a dynamic head of 20 ft (see page 5 of 19, Potable Water Supply for the Construction Administration Area Design Requirements Calculation Procedure) plus 50 ft of pressure difference between the pipe inlet and outlet. Therefore, the supply must enter the construction administration area at a pressure of at least 70 ft rather than 50 ft. The calculation should be similar to page 2 of 8.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 14.2 Calculation Package Pg. #: 6 of 8 Line#: Code: c
Original Comment # 38

Comment: With regard to the potable water supply for the construction administration area, the formula used to calculate Re, the unit for V is ft³/s not ft/s.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section#: 14.2 Calculation Package Page#: 8 of 8 Line#: Code: c
Original Comment # 39

Comment: With regard to the potable water supply for the construction administration area: the fire protection primary water supply at the west side of the construction administration area should supply a dynamic head of 45 ft (see page 13 of 19, Potable Water Supply for the Construction Administration Area Design Requirements Calculation Procedure) plus 325 ft of pressure difference between the pipe inlet and outlet. Therefore, the supply must enter the construction administration area at a pressure of at least 370 ft rather than 325 ft. The calculation should be similar to page 2 of 8.

Construction Quality Assurance Plan

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2: Pg. 2-1: Line#: 12 Code: C
Original Comment # 40

Comment: The ARAR criteria should be cross-referenced to the relevant specifications sections, as appropriate. The implication is that the CQA requires reference to ARARs during construction, at which time the specifications and the CQA document should have been written to be compliant.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.

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Section 2.2.1.1: Pg. 2-2: Line#: 13 Code: C
Original Comment # 41

Comment: The requirements for the compacted clay liner may not be consistent with the specifications, which should therefore be referenced. For example the ARARs do not specify several geotechnical index parameters that are requirements elsewhere.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2.1.1: Pg. 2-2: Line#: 26 Code: C
Original Comment # 42

Comment: The status of the test fill conclusions and their incorporation into the present document is left unclear.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2.1.2: Pg. 2-3: Line#: 3 Code: C
Original Comment # 43

Comment: The incorporation of the results from the test fill, specifying construction equipment and procedures, is needed for the present document.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2.1.2: Pg. 2-3: Line#: 19 Code: C
Original Comment # 44

Comment: The details presented for testing would seem more appropriate in other sections of the document. However, the specification for moisture/density should be based on a three-point Proctor line-of-optimums approach.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2.1.3: Pg. 2-5: Line#: 22 Code: C
Original Comment # 45

Comment: The geomembrane is placed on a GCL, not directly on the compacted clay liner.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 2.2.3.7: Pg. 2-10: Line#: 1 Code: C
Original Comment # 46

Comment: This paragraph is confusing; it states that the specifications for clay thickness are either 1.5 feet or 2 feet, depending on the ARAR or the functional requirements of the design. This paragraph should simply state the most conservative specification, and then indicate that this meets or exceeds the ARAR. The same comment applies to the hydraulic conductivity.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 4.1: Pg. 4-1: Line#: 15 Code: C

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Original Comment # 47

Comment: The CCM is an individual, supported by a staff, rather than a group. His/her qualification requirements clearly indicate this assumption.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section 4.1: Pg. 4-2: **Line#:** Figure 4-1 **Code:** C

Original Comment # 48

Comment: The role of the Engineer (or lead design engineer) and the construction engineer is undefined. The resident engineer's interpretation of the plans and specifications in the field should be confirmed with the Engineer. Secondly, the functional role of the contract administrator dictates that he report directly to the contracts manager.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section 4.4.3: Pg. 4-5: **Line#:** 27 **Code:** C

Original Comment # 49

Comment: The Subcontractor's field representatives' line of communication should flow through the Resident Engineer, whose role is to specifically recognize and address, in conjunction with his organization, any discrepancies between plans and specifications, or CQA documents.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section 4.5.3: Pg. 4-9: **Line#:** 1 **Code:** C

Original Comment # 50

Comment: The CQC consultant is clearly responsible for other testing, besides on-site soils laboratory tests. For consistency, please expand on other testing, both on- and off-site.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section 5.1.2: Pg. 5-3: **Line#:** 5 **Code:** C

Original Comment # 51

Comment: Example forms would be much more useful to this section to support/replace the narrative.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.
Section 6.3.1: Pg. 6-2: **Line#:** 11 **Code:** C

Original Comment # 52

Comment: The required survey accuracy seems unnecessarily low (within 1 foot horizontal) for present technology. Suggest that horizontal and vertical tolerances be consistent with available accuracy and precision.

Commenting Organization: OEPA **Commentor:** GeoTrans, Inc.

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Section 7.3: Pg. 7-2: Line#: 23 Code: C
Original Comment # 53

Comment: The subcontractor's equipment and methods of construction should be consistent with appropriate specifications (which were not be referenced). Means and methods, unless indicated in the specifications, are typically left up to the contractor. Why is there a need for a "letter" to describe contract requirements that are part of the engineering design for subgrade preparation? This requirement, if necessary, should be spelled out as a submittal requirement in the specifications. Secondly, similar requirements are not discussed in the contract for soil liner components.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 7.3: Pg. 7-3: Line#: 1 Code: C

Original Comment # 54

Comment: The reference to a specifications section to cover dewatering is appropriate, but inconsistent with the lack of reference to specifications elsewhere.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 7.5: Pg. 7-5: Line#: 20 Code: C

Original Comment #55

Comment: This section should also address soil liner conditioning prior to placement, including general observations, e.g., clod size, that should be made by the CQC Consultant.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 7.8: Pg. 7-9: Line#: 17 Code: C

Original Comment # 56

Comment: The qualification, "unless otherwise noted in the project specifications," suggests that a reference to the appropriate specifications be made, to avoid a conflict.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 8.3.3: Pg. 8-5: Line#: 4 Code: C

Original Comment # 57

Comment: The reference to any submittal should refer to the specifications section which covers the subcontractor's schedule of submittals for all materials and equipment. This submittal schedule should reference the specification governing the performance of a particular component.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 8.4: Pg. 8-6: Line#: 23 Code: C

Original Comment # 58

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Comment: This section on labeling should be addressed in section 8.3.3 along with the QC certification. Presumably, all labeled information will match the roll numbers, etc. identified on the QC certifications.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 8.7: Pg. 8-9: Line#: 30 Code: C
Original Comment # 59

Comment: The process for verification that lines and grades have been achieved for the subgrade should be described in greater detail. This important QC function, the survey, is a responsibility of the subcontractor. Unless the CQC team is provided with a thoroughly documented report, with certification, or other contractor-independent mechanism, there will be no assurance that line and grade accuracy has been attained.

Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section 8.13.1: Pg. 8-35: Line#: 20 Code: C
Original Comment # 60

Comment: The initial lift thickness must be consistent with compaction requirements.

Air Monitoring Plan

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg #: n/a Line #: n/a Code: C
Original Comment #: 61

Comment: The introduction of this plan states that the air monitoring conducted by both the environmental group and the occupational group, will be used to verify the effectiveness of administrative and engineering control techniques. The Occupational Air monitoring program is not mentioned again in the plan. How will the Occupational Air Monitoring program be used verify the effectiveness of the proposed control techniques?

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg #: n/a Line #: n/a Code: C
Original Comment #: 62

Comment: Will the WAC for the OSDF include radium? Radium bearing wastes generate radon and therefore, radon should be included as a radionuclide of concern. Radon is not mentioned in this air monitoring plan.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg #: Line #: Code: C
Original Comment #: 63

Comment: This Air Monitoring Plan does not contain any significant changes from the existing

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Environmental Air Monitoring program. What efforts will be employed to ensure timely reporting of analytical results? Annual reporting will not be sufficient to verify the effectiveness of administrative and engineering controls.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.2 Pg #: 1-3 Line #: 12-17 Code: C
Original Comment #: 64

Comment: These lines indicate that this plan will address, as a minimum, the collection of air particulate data in real-time, as appropriate. This plan does not address real-time monitoring or its appropriateness. A statement should be made addressing real-time monitoring.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3 Pg #: 1-3 Line #: n/a Code: C
Original Comment #: 65

Comment: The scope of this plan should address the potential impacts to the public and the environment and how these potential impacts will be identified and measured. These impacts should include, as a minimum, radionuclide emissions (including radon), fugitive dusts, and data reporting/frequency.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2. Pg #: n/a Line #: n/a Code: C
Original Comment #: 66

Comment: A table identifying each of the ARARs and how compliance will be achieved should be included in this section or in an appendix.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2 Pg #: 2-2 Line #: 18-25 Code: C
Original Comment #: 67

Comment: The functional requirement of the air monitoring plan is to ensure that emissions to the public and the environment are within compliance guidelines. This should include monitoring methods that will demonstrate compliance. This may include the existing environmental air monitoring program.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3 Pg #: n/a Line #: n/a Code: C
Original Comment #: 68

Comment: The risk from radon should be included in this section, as well as a section that describes the accuracy of modeling to actually measured air concentrations. Include a section identifying historical values, and what these values may increase to during OSDF activities.

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Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.3 Pg #: n/a Line #: n/a Code: C
Original Comment #: 69

Comment: The technical basis for this document is NOT a set of limits set by the EPA and DOE. The technical basis is how monitoring will be conducted to demonstrate compliance with these guidelines. It will also be useful to show how actually measured concentrations will be compared against predicted values.

Commenting Organization: Ohio EPA Commentor: ODH
Section #: 3.4.3 Pg #: Line #: Code: C
Original Comment # 70

Comment: In Section 3.4.3 of the Air Monitoring Plan, target radionuclide particulates are listed for air monitoring. In Table 6-1, a minimal analysis regimen is presented. Upon comparison, there are differences in the plutonium and neptunium isotopes suggested. Which list of parameters is correct?

Commenting Organization: Ohio EPA Commentor: ODH
Section #: Pg #: Line #: Code: C
Original Comment # 71

Comment: What are the contingencies for continuous operation of the air monitors if periods of high dust load or power outages occur?

Commenting Organization: Ohio EPA Commentor: ODH
Section #: Air Monitoring Plan Pg #: Line #: Code: C
Original Comment # 72

Comment: There may be heightened apprehension by stakeholders of radiological exposures upon initiation of excavation/placement activities. It may be prudent to offer the option of more frequent sample collections either initially or during periods of increased site activity to enhance public confidence in the efficacy of the air monitoring program.

Borrow Area Management and Restoration Plan

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.6 Pg #: 4-3 Line #: 20 Code: c
Original Comment #: 73

Comment: Please explain the rationale for using temporary seeding, vs. covering with a tarp. It seems that by the time the seed takes hold, erosion of the topsoil stockpile could have easily already occurred.

Groundwater Monitoring Plan

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Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg. #: Line #: Code: C
Original Comment # 74

Comment: The Ohio EPA will not approve the final OSDF design unless it contains an approvable groundwater monitoring plan.