

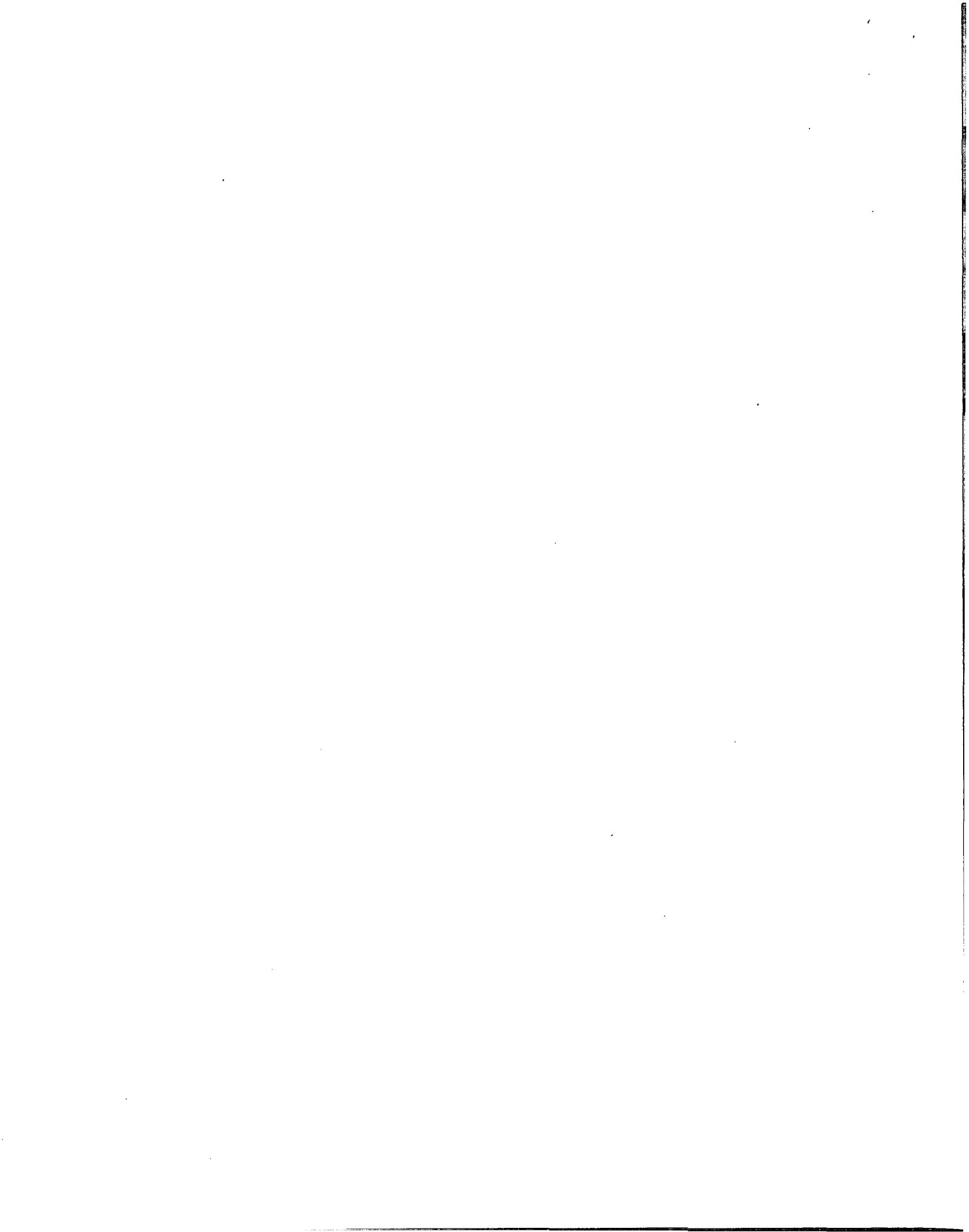
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COMMENTS - RESPONSE TO COMMENTS ON PRELIMINARY SILO
SUPERSTRUCTURE DESIGN

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09/03/96

OEPA
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COMMENTS

DOE-FN





State of Ohio Environmental Protection Agency

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George V. Voinovich
Governor

September 4, 1996

RE: DOE FEMP
MSL 531-0297
HAMILTON COUNTY
COMMENTS - OU5 AREA 1
PHASE 1 RAWP

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 July 19, 1996 submittal, "Transmittal of the Draft Operable Unit 5 Area 1, Phase 1 Remedial Action Work Plan." The Ohio Department of Health, Bureau of Radiation Protection has also reviewed the Work Plan and their comments have been included. Ohio EPA has a significant number of concerns with the document. The concerns are outlined in the attached comments.

At present Ohio EPA does not believe the document is sufficient to warrant the initiation of excavation. If DOE desires to initiate excavation prior to final approval of the document, Ohio EPA recommends DOE collect a soil sample at the highest RTRAK precertification sampling point within each CU prior to the start of excavation. The sample should be analyzed by the on-site lab for total uranium to ensure that soil exceeding the WAC is not placed in the OSDF stockpiles. In addition excavation should not be initiated in any area for which certification will not immediately follow excavation. Based upon the document, the only area that meets this criteria is Area B.

Though Ohio EPA is supportive of the use of HPGe and RTRAK for activities at Fernald, we believe substantially more definitive procedures and field testing are required to gain confidence in its use. Ohio EPA is available to meet with DOE to reach a timely resolution of the attached comments. Ohio EPA requests that DOE provide the RTRAK precertification data to us in electronic format at it's earliest availability.

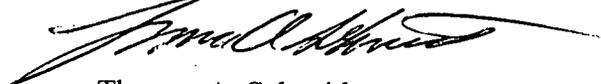
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(Janke(rj))
partial action
response to
doe-1144-96(9878)

Mr. Johnny Reising
September 4, 1996
Page 2

If you have any questions, please contact 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
- Sharon McLellan, PRC
- Manager, TPSS/DERR,CO
- Dave Ward, GeoTrans

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OHIO EPA COMMENTS
ON AREA 1 PHASE 1 RAWP

General Comments

- 1) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: M
Original Comment #:
Comment: The document does not include an acceptable level of schedule detail or deliverable list. The document should include a summary table with dates for PSP submittals, excavation start, excavation complete, and submittal of the certification package for each area or CU addressed within the RAWP.
- 2) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: M
Original Comment #:
Comment: The document does not address in sufficient detail the method for evaluating WAC attainment prior to initiating excavation. Data from Ohio EPA's initial split sampling in Area D suggests the HPGe does not adequately characterize for WAC attainment and thus it is not likely the RTRAK could attain an acceptable level of confidence that WAC is being met.

In addition, the document does not address the use of field instruments during excavation to determine soils needing treatment for organics. As agreed during the OU5 FS/PP, soil exhibiting an above background level of organics by field measurements (OVA) would be treated prior to disposal in the OSDF.

Further actions to resolve these issues are necessary prior to initiating excavation activities.

Specific Comments

- 3) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.2 Pg #: 2-2 Line #: 4-5 Code: C
Original Comment #:
Comment: ALARA principles are applied through the use of fugitive dust controls, surface water management controls, etc. and demonstrated as effective through the use of hand-held instruments. The use of hand-held instruments is not an application of ALARA principles.
- 4) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.3 Pg #: 2-2 Line #: 33-37 Code: C
Original Comment #:
Comment: If/when soils are stockpiled, specifically where and how long will the OSDF segregated soils be stockpiled, and where and how long will the greater than WAC soils be stockpiled?
- 5) Commenting Organization: Ohio EPA Commentor: OFFO

Ohio EPA Comments
 September 4, 1996
 Page 2

Section #: 2.1.3 Pg #: 2-2 Line #: 39-42 Code: C

Original Comment #:

Comment: Engineering controls should be implemented to prevent recontamination of remediated areas, or the source of storm water run-off should be evaluated prior to remediation activities in downstream area. Recontamination should be prevented.

6) Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 2.3 Pg #: 2-4 Line #: 7-15 Code: M

Original Comment #:

Comment: It does not seem prudent to conduct excavation to meet FRL/BTVs in areas where DOE does not intend to immediately follow up with certification. As no grading or filling may occur prior to completion of certification, such excavations will lead to unacceptable conditions for erosion and fugitive emissions. DOE should revise the document such that no excavation for FRL/BTV attainment will be initiated in areas not receiving immediate certification following excavation. The work plan should only address those areas to be remediated and certified under this scope of work.

7) Commenting Organization: Ohio EPA Commentor: DSW

Section #: 2.3.1 Pg #: 2-5 Line #: 10 Code:

Original Comment #:

Comment: This seems an appropriate place to explain why section D is divided into north and south.

8) Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 2.3.2 Pg #: 2-5 Line #: 17-21 Code: C

Original Comment #:

Comment: Storm water should be rerouted unless it is demonstrated that contamination is NOT present. Recontamination of remediated areas could cause costly delays.

9) Commenting Organization: Ohio EPA Commentor: DSW

Section #: 2.3.2 Pg #: 2-5 Line #: 20-21 Code:

Original Comment #:

Comment: The statement in this section "if contamination is demonstrated" seems incongruous with the statement on page 2-4 lines 11-13 that the adjacent areas will not be certified. Is the process to demonstrate contamination or lack of contamination different than the process for certification and if so what is the process that will be used for demonstration of contamination?

10) Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 2.3.2 Pg #: 2-7 Line #: 1-5 Code: C

Original Comment #:

Comment: Will FTF surface water drainage be isolated from Area D?

Ohio EPA Comments
 September 4, 1996
 Page 3

Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Figure 2-2 & 2-3 Pg #: Line #: Code:
 Original Comment #:

Comment: There appears to be a discrepancy between what's shown in Figures 2-2 and 2-3. Figure 2-3 shows all of area D as a 6" removal area, Figure 2-2 shows part of area D as a 2.5'-5' removal.

11) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 3.1.5 Pg #:3-2 Line #: Code: C
 Original Comment #:

Comment: In areas where DOE proposes not to conduct excavation activities prior to certification will the basis for that decision still be the 75% of the FRL/BTV? It would seem to be the necessary decision criteria for these areas as well due to the same statistical issues that effect excavated areas.

12) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 3.1.5 Pg #: 3-2 Line #: 9-11 Code: C
 Original Comment #:

Comment: As previously noted, Figure 2-2 shows contamination extending to at least 2.5' within Area D. It is not acceptable to limit excavation to 0.5' in this area.

13) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: 3 Pg. #: 3-3 Line #: 17 Code: M

Comment: The in situ radiological methods (RTRAK and HPGe methods) are proposed for use in precertification sampling. The RAWP should include instrument calibration procedures, quality assurance/quality control (QA/QC) procedures, and operation standards for these devices or should reference the appropriate document [e.g., Sitewide CERCLA Quality Assurance Project Plan (SCQ)] where this information is provided.

14) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 4.1.3 Pg #: 4-1 Line #: 30-32 Code: C
 Original Comment #:

Comment: DOE should remove all field tiles in the areas proposed for excavation within this RAWP. The need for excavation of these tiles is based upon their potential as pathways for contaminant and water transport. Elimination of the tiles will prevent unwanted migration of water into remediated areas as well as the area of the OSDF.

15) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 4.1.3 Pg #: 4-2 Line #: 4-8 Code: C
 Original Comment #:

Comment: During remediation activities along the east fenceline, will access to air monitors be

Ohio EPA Comments
September 4, 1996
Page 4

maintained, as well as power? Ohio will have an air monitor along the east fenceline during this time period, access to this location will have to be maintained. The ability to get samples off site will also have to be maintained.

- 16) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.1.5.3 Pg #: 4-4 Line #: 20 Code: c
Original Comment #:

Comment: DOE has incorrectly cited Ohio Administrative Code (OAC) 3745-17-07 (B) (4), (5),(6) as the governing regulations for the particulate emissions from paved roads, unpaved roads and material storage piles. OAC 3745-17-07 is applicable to "old" sources that were in existence prior to February 15, 1972. OAC 3745-31-05(A)(3) (please see page B.3-18 of the OU5 ROD) requires that new sources employ the best available technology (BAT). The BAT determination is made on a case-by-case basis. However, activities such as controlling fugitive dusts from paved and unpaved roads have time and again resulted in standards that are more stringent than the standards cited in OAC 3745-17-07. The following examples have been taken from the Administrative Code for activities similar to those proposed in this Work Plan.

paved roadways	OAC 3745-17-12(F)(2)	1	minute	exceedence	in	any	60-minute	period
unpaved roadways	3745-17-12(F)(1)	3	"	"	"	"	"	"
material storage piles	3745-17-12(C)(2)	1	"	"	"	"	"	"

The Ohio EPA has consistently maintained the position that the remedial activities at the FEMP should employ BAT and ALARA goals whenever feasible. Because the emissions of concern are from a Superfund action and the methods to comply with BAT do not require expensive, innovative or burdensome requirements, the Ohio EPA will not entertain any less stringent standards than those that apply to quarrying operations.

- 17) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.1.5.3 Pg #: 4-5 Line #: 31-32 Code: C
Original Comment #:

Comment: This sentence implies that air monitoring minimizes fugitive emissions. Air monitoring may be a tool to demonstrate that fugitive emission controls are effective.

- 18) Commenting Organization: Ohio EPA Commentor: DSW
Section #: 4.1.5.9 Pg #: 4-8 Line #: 10-14 Code: M
Original Comment #:

Comment: This refers to the Stormwater Pollution Prevention Plan (SWPPP) for monitoring requirements with respect to the sediment ponds/traps. The SWPPP plan refers to individual OU Remedial Design Work Plans, which, for OU5, does not contain any specific monitoring parameters or frequency. The SWPPP does state that "sampling parameters will include those identified in the NPDES Permit for Outfalls *4003, *4004, *4005, and *4006 as well as any

Ohio EPA Comments
 September 4, 1996
 Page 5

other contaminants of concern in the area of activity which can reasonably be expected to appear in stormwater." The intent of this sampling is to monitor the effectiveness of the erosion/stormwater controls by monitoring the water quality associated with each remedial activity. The RAWP should include a monitoring schedule for ASCOC's in addition to the specific parameters listed in the SWPPP.

- 19) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 4.1.5.4 Pg #: General Line #: n/a Code: C
 Original Comment #:
 Comment: The IEMP is not yet finalized. Special modifications to the EMP may be necessary to reflect changing conditions at the FEMP. Construction activities near the FEMP fence line, yielding a potential for increased fugitive emissions, may necessitate a more comprehensive sampling and/or analysis of EMP air filters for the air sampling stations located in close proximity to the construction activities. Thorium and/or radium analysis may be necessary at an increased frequency than what is currently performed.
- 20) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 4.2.3 Pg #: 4-11 Line #: 37-39 Code: C
 Original Comment #:
 Comment: If vehicles must traverse remediated areas, what control measures will be used to prevent recontamination of remediated areas? OAC 3745-17-08(B)(9) states "The covering, at all times, of open bodied vehicles when transporting materials likely to become airborne;" as a means to minimize or eliminate visible fugitive emissions. Will vehicles be covered when transporting soils to stockpile areas?
- 21) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 5.2 Pg #:5-3 Line #: 15-20 Code: C
 Original Comment #:
 Comment: Additional discussion of how 17 COCs were derived versus the numerous contaminants for which BTVs are provided in Table 5.1 should be included in the section. In addition a discussion of what "Failed Ecological Risk Screening" from Table 5.1 should be included in this section.
- 22) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 5.2 Pg #:5-3 Line #: 15-20 Code: C
 Original Comment #:
 Comment: In general the document is confusing as to whether in a particular section it is referring to just the FRL or the lesser of the FRL & BTV. The document should be revised regarding discussions of FRL attainment. The use of text, such as "FRL/BTV", to designate when the lesser of the two is being used is requested.

Ohio EPA Comments
September 4, 1996
Page 7

Original Comment #:

Comment: It appears as though there should be 17 COC's under Ecological Concern, not 16 as shown.

- 30) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6 Pg #: General Line #: n/a Code: C
Original Comment #:
Comment: What methods will be used with the HPGe detector to determine if a "hot spot" (3 X FRL) is present within a 12 m² area? The methods in this section do not appear to adequately address the detection of hot spots.
- 31) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.1 Pg #: 6-1 Line #:22-24 Code: M
Original Comment #:
Comment: Insufficient detail is provided regarding the use of HPGe and RTRAK for precertification activities. Additional detail regarding QA/QC, procedures for calibration, etc. should be provided. Preliminary data from Ohio EPA's split sampling with DOE at Area D suggest the HPGe may not perform as well as expected for precertification needs. Procedures addressing control of variables including weather, soil matrix, other gamma sources, etc. need to be reviewed by Ohio EPA. Additional details need to be provided concerning decision criteria during use of HPGe and RTRAK for determination of WAC and upgradient "contamination" for stormwater control.
- 32) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.1.1 Pg #:6-2 Line #: 7-9 Code: C
Original Comment #:
Comment: Unless effectiveness of the HPGe is much improved over that exhibited in Area D, the use of RTRAK and HPGe to verify the areal extent of excavation may result in a significant under estimation of the area requiring remediation.
- 33) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.1.1 Pg #: 6-2 Line #: 21-22 Code: C
Original Comment #:
Comment: The document fails to specify the relevance of "hot spot" during postremedial sampling. This is in light of the previous bullet which suggests targeting 75% of the FRL
- 34) Commenting Organization: Ohio EPA Commentor: OFFO
Section #:6.2 Pg #:6-3 Line #: 6 Code: E
Original Comment #:
Comment: The text should reference Table 6-2.

Ohio EPA Comments
 September 4, 1996
 Page 8

- 35) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 6.3 Pg #:6-8 Line #: 5-14 Code: C
 Original Comment #:
 Comment: It is also important to ensure the repeatability of measurements by the HPGe and RTRAK. The study should be revised to include an evaluation of repeatability. The study should also include a variety of soil matrices (e.g., heavy rock loading, etc.).
- 36) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 6.3 Pg #: 6-9 Line #: 1-9 Code: C
 Original Comment #:
 Comment: Comparability testing should include the ability of the HPGe detector to identify areas with probable hot spots. The appendix indicates a maximum area for a hot spot of 25m², what minimum area for a hot spot will be used? Will the RTRAK be the method used to identify hot spots?
- 37) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 6.5 Pg #: 6-10 Line #: Code: C
 Original Comment #:
 Comment: In order to be fully involved in the field program and decision making, Ohio EPA requests DOE provide a main point of contact for acquiring GIS data generated during implementation of this RAWP.
- 38) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: 6 Pg #: 6-11 Line #: 11 Code: M
 Comment: The RTRAK measurements may be affected by ambient conditions (e.g. soil moisture) at the point of measurement. The RAWP should discuss the ambient condition parameters that will be routinely monitored and how these data will be reported with the corresponding RTRAK measurements. In addition, the RAWP should discuss procedures (e.g., conventional surveying) for quality assurance/quality control (QA/QC) of the global positioning data.
- 39) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 6.5.1 Pg #: 6-11 Line #: 15-19 Code: C
 Original Comment #:
 Comment: Will GPS information be included with the HPGe measurements?
- 40) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: 6 Pg #: 6-11 Line #: 17 Code: C
 Comment: The referenced text implies that HPGe data will go into the SWIFTS database but does not indicate that it will be inputted to the SED database. Conversely, the preceding paragraph states that the RTRAK data will be transferred to the SED. The text should be

Ohio EPA Comments
 September 4, 1996
 Page 9

modified to clarify the databases in which the various types of data (e.g., measuring locations, ambient condition data, analytical data, RTRAK results, and HPGe results) will be stored.

- 41) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 7.1 Pg #: 7-1 Line #: 24-32 Code: M
 Original Comment #:
 Comment: Based upon the preliminary data from Area D, Ohio EPA recommends DOE collect total uranium samples at the point of the highest RTRAK or HPGe precertification reading within each certification unit or area to ensure WAC attainment prior to initiating excavation.
- 42) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 7.5 Pg #: 7-6 Line #: 1-4 Code: C
 Original Comment #:
 Comment: The CUs should be reevaluated based upon detections above the lowest of the BTV and FRL for each COC. Based upon this reevaluation appropriate changes should be made to the CUs.
- 43) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 7.5 Pg #: 7-6 Line #: 4-5 Code: C
 Original Comment #:
 Comment: The intent of this sentence is unclear to the reviewer. The COCs were determined based upon human health and ecological risk.
- 44) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 7.5 Pg #: 7-6 Line #: 5-9 Code: M
 Original Comment #:
 Comment: a) The decision to develop separate CUs for each set of COCs seems inappropriate to Ohio EPA. If as suggested by DOE the primary pathway for primary COC distribution is airborne deposition, then the same should be for the secondary COCs unless a specific activity resulted in contamination of an area. If the mode of deposition is the same, then the CU should be the same. Unless specific activities, such as the FTF or STP, resulted in contamination then airborne deposition should be assumed otherwise a technical discussion of the deposition activity should be included for each CU.
 b) In addition to the technical concerns with CU designation, it is unclear how administratively certification will be accomplished for each CU. Will a CU only be certified for PAHs and then a separate CU that may include that particular PAH CU define primary COCs, etc. etc.? This process would seem to be much clearer with one set of CUs for all COCs. The document does not clearly define the process for completion of Certification.
- 45) Commenting Organization: Ohio EPA Commentor: OFFO

Ohio EPA Comments
September 4, 1996
Page 10

Section #: 7.6 Pg #: General Line #: n/a Code: C

Original Comment #:

Comment: Will separate certification sampling plans be submitted for each CU? And. will the CUs be the same areas that are identified in this work plan, i.e. Area D?

- 46) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: 7 Pg. #: 7-7 Line #: 17 Code: C
Comment: The RAWP should provide a more detailed justification for the use of 12 samples for documenting cleanup. The justification should state whether this number is qualitatively or quantitatively based. A detailed description of the rationale and derivation of the number of samples is required including a discussion of underlying assumptions. All calculations should be thoroughly documented including the procedures used to compute the requisite statistical parameters (e.g., variance calculations, etc.). An example calculation for a primary COC should be provided to illustrate the computation of the number of samples to document cleanup.
- 47) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: 7 Pg. #: 7-7 Line #: 32 Code: C
Comment: For clarity, the decision path described in the referenced text should be presented in flow chart form. In addition, the text should clarify what is meant by "the collection of additional samples." Specifically, will another suite of 12 samples be collected at random from the CU grid cells or will some other approach be implemented?
- 48) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 7 Pg #:7-8 Line #: 1-8 & 25-31 Code: C
Original Comment #:
Comment: It is unacceptable to have any of the actions described in these bullets occur without agency approval unless additional detail is provided in the document delineating the decision making process at this point.
- 49) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: 7 Pg. #: 7-8 Line #: 26 Code: C
Comment: The proposed distribution of certification units is based on existing soil data and process knowledge. Clarification is required regarding certification unit re-delineation based on the spatial distribution of the sample (concentration data). Guidelines should be specified in order that the integrity of the certification unit distribution is maintained after re-delineation.
- 50) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
Section #: 7 Pg. #: 7-8 Line #: 33 Code: C
Comment: A discussion of the treatment of non-detect values in the computation of \bar{x}_i should be included in the text. Additionally, the definition of the sample variance term should indicate that it will be calculated from the samples collected from the i^{th} CU.

Ohio EPA Comments
September 4, 1996
Page 6

- 23) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 5.2 Pg #: 5-3 Line #: 22-26 Code: C
Original Comment #:
Comment: The table should be revised to include detections above the BTVs. The number and percent of samples detected above the FRL column should include detects above the BTV where it is lower than the FRL.
- 24) Commenting Organization: Ohio EPA Commentor: DSW
Section #: 5.2 Pg #: 5-4 Line #: 25 Code: E
Original Comment #:
Comment: (f) is used in Table 5.1 to depict product of weapons fallout, not (w) as stated.
- 25) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 5.4 Pg #: 5-5 Line #: Code: C
Original Comment #:
Comment: The maps for those COC's with BTVs lower than their respective FRLs should be revised to include detects and non-detects which exceed the BTV.
- 26) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 5.6 Pg #: 5-6&7 Line #: 33, 1 Code: C
Original Comment #:
Comment: Based upon Figure E-11 and the fact that the Tc-99 WAC is equivalent to or less than the FRL, significant areas exceed the Tc-99 WAC.
- 27) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Table 5.1 Pg #: Line #: Code: C
Original Comment #:
Comment: a) Why is a FRL of 250 mg/kg used for Total Uranium rather than that specified in the OU5 ROD of 82 mg/kg?
b)The table should be revised to include aluminum.
c)Provide a footnote to explain "Failed Ecological Risk Screening."
d)Footnote "n" is not used within the table.
- 28) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Figure 5-1 Pg #: Line #: 2nd process step Code: E
Original Comment #:
Comment: Spelling error, Quatitative should read Quantitative.
- 29) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Figure 5-1 Pg #: Line #: Between the third and fourth process steps Code:

Ohio EPA Comments
September 4, 1996
Page 11

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

Comment: The referenced text should be revised as follows: If the computed value (t) exceeds the critical value of a t-distribution for $\alpha = 0.05$ and $b = 0.2$ at the appropriate degrees of freedom then the null hypothesis, which is that the average soil level within the CU is **equal to or greater than** the FRL or BTV, is rejected.

- 51) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 7.8 Pg #: 7-10 Line #: 13-17 Code: C
Original Comment #:
Comment: Ohio EPA understood Area C certification was necessary to conduct disposal facility construction. Why is no date provided for completion of certification for this unit?
- 52) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Table 7-1 Pg #: 7-11 Line #: Footnote b Code: C
Original Comment #:
Comment: Footnote "b": As discussed in a previous comment, Ohio EPA believes that BTVs should be used in the delineation of CUs and the document should be revised accordingly.
- 53) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Figure 7-1 Pg #: Line #: Code: C
Original Comment #:
Comment: During early discussions of this document, Ohio EPA expressed concern over dilution of contamination by dividing contaminated areas by multiple CUs. The division of the FTF into 4 CUs centered on it is an example of our concern. The CUs should be revised to address this and other centralized contamination areas.
- 54) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix A Pg #: 02100-2 Line #: 1.05A Code: C
Original Comment #:
Comment: Ohio EPA requests that a copy of the subcontractor dust suppression plan should be provided to Ohio EPA for review.
- 55) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix A Pg #: 02100-2 Line #: 1.05B Code: C
Original Comment #:
Comment: Ohio EPA was unable to find the detailed drawing for the debris stockpile in the attached drawings. Please reference the appropriate drawing.
- 56) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix A Pg #: 02100-3 Line #: 3.02A Code: C

Ohio EPA Comments
 September 4, 1996
 Page 12

Original Comment #:

Comment: The document fails to address the disposition of trees and shrubs. The document requires that stumps be placed in the debris stockpile but does not address the disposition of the upper portions of the vegetation. The document should be revised to provide disposition for the trees and shrubs. Does DOE intend to dispose of stumps within the OSDF?

- 57) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Appendix A Pg #: 02100-3 Line #: 3.02B Code: M
 Original Comment #:
 Comment: No backfill or grading activities may occur prior to certification completion. Simply waiting until precertification is complete is unacceptable. Such activities would result in dilution of contaminants through mixing which is inconsistent with the concerns outlined in Ohio EPA's letter of concurrence with the OU5 ROD.
- 58) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Appendix A Pg #: 02100-4 Line #: Code:
 Original Comment #:
 Comment: Protection of the electric tower should be included in the specification.
- 59) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Appendix A Pg #: 02110-5 Line #: 3.02 C Code:
 Original Comment #:
 Comment: This section mentions cleaning the filter fabric on the riser structure however the drawing detail on 91X-5900-G-00238, 75X-5500-X-00450, and 75X-5900-G-00456 does not show riser pipe wrapped in filter fabric. Please include wrapping riser pipe with geotextile fabric ODOT 712.09 C to prevent holes in riser pipe from plugging.
- 60) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Appendix A Pg #: 02730-3 Line #: 3.02 D Code:
 Original Comment #:
 Comment: Two of the risers are shown with one inch holes as called out in this specification, however the riser in drawing 91X-5900-G-00238 is shown with 1.250" holes. This specification would not apply to that riser. Also, this section would be appropriate to call out the geotextile wrap for the riser as indicated in a previous comment.
- 61) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Appendix A Pg #: 02920-3 Line #: 3.02C Code: C
 Original Comment #:
 Comment: The specification does not provide a timeframe by which the east impacted soil stockpile will be seeded. Inclusion of a timeframe for this and other seeding activities will prevent undue erosion of soil.

Ohio EPA Comments
September 4, 1996
Page 13

- 62) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Drawings 75A-5500-G-00439 & 75A-5500-G-00441 Line #: Code:
Original Comment #:
Comment: Both of these drawings have a sediment basin #1. Recommend renaming the sediment basin on drawing 75A-5500-G-00441 to sediment basin #4. Also change drawing 75X-5500-X-00450 to reflect the renaming.
- 63) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Drawing 75A-5500-G-00441 Line #: Code:
Original Comment #:
Comment: The purpose of the diversion ditch and sediment fence along the east side of the excavation is unclear. There doesn't appear to be barriers to run-on of surface water into the excavation area. Water appears to be diverted to the laydown area.
- 64) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Line #: Code:
Original Comment #:
Comment: Install indicators in sediment basins to indicate the level at which sediment should be removed. Such indicators should be included on the design drawings.
- 65) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Line #: Code:
Original Comment #:
Comment: Diversion ditches constructed to prevent run-on of surface water should have check dams to prevent ditch erosion.
- 66) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Drawing 75X-5500-X-00452 & 91X-5900-G-00237 Code:
Original Comment #:
Comment: Use of straw/hay bales are not recommended. Ohio EPA's position on straw/hay bales has been clarified with DOE and FERMCO several times. We would expect that DOE will incorporate these recommendations into all future design submittals.
- 67) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix A Pg #: Line #: Code:
Original Comment #:
Comment: The sediment basins for the impacted soil stockpiles should be sized to include the drainage area of any run on water not diverted from them.
- 68) Commenting Organization: Ohio EPA Commentor: DSW

Ohio EPA Comments
 September 4, 1996
 Page 14

Section #: Appendix B Pg #: B.2-1 Line #: Table B-2 Code:
 Original Comment #:

Comment: The statement is made that "neither habitat nor populations of the state-listed threatened spring coralroot (*Corallorhiza wisteriana*) were found on FEMP property." Although no populations were found, as stated in Results of Surveys for Spring Coral Root, Hamilton County Ohio, July 11, 1994, "Despite **the presence of suitable habitat near the western edge of the northern woodlands** (emphasis added) Spring Coral-root was not observed at any of the locations surveyed", suitable habitat is present on the FEMP. Please revise the document appropriately.

- 69) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Appendix B Pg #: B.3-26 Line #: Well Abandonment Code:
 Original Comment #:
 Comment: OAC 3745-09-10 applies to all existing wells, not only wells constructed after February 15, 1975 as indicated.
- 70) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: Appen. C Pg #: C.1-2 Line #: 32 Code: C
 Comment: Clarification should be provided to indicate that information input for the analysis will be obtained from the certification soil samples for the given certification unit under consideration.
- 71) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Appendix C, Table C.1-1 Pg #: C.1-8 Line #: Code: C
 Original Comment #:
 Comment: The schedule for certification requirements provided in this table disagree with the only date provided in table on page 7-10. If certification is truly required for Area A by November 1996 then the document must be revised to reflect the fact this area will be certified under this work plan. As stated in previous comments, the RAWP must be revised to include a schedule for those areas addressed under its scope.
- 72) Commenting Organization: OEPA Commentor: GeoTrans, Inc.
 Section #: Appen. C Pg #: C.3-5 Line #: 24 Code: C
 Comment: A primary objective of the study should be to demonstrate the accuracy of the device over the complete range of field conditions that may possibly be encountered during the RTRAK's use in Area 1 Phase I. At a minimum, RTRAK concentration data and coincident radionuclide concentrations obtained through conventional laboratory analyses should be obtained and compared over the complete range of possible soil moisture, soil density, and vegetation conditions that may potentially be encountered during full deployment of the device.
- 73) Commenting Organization: Ohio EPA Commentor: DSW

Ohio EPA Comments
September 4, 1996
Page 15

Section #: Appendix D Pg #: Line #: Code:
Original Comment #:

Comment: Consideration should be given to an additional sediment pond installed in the vicinity of NPDES *4006. There is already a basin there from previous use as a borrow area so that construction of a basin should be relatively simple. A basin in this area would capture all water from the site prior to discharge through *4006.

74) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Appendix D Pg #: D-2 Line #: 19-21 Code:
Original Comment #:

Comment: The biota monitoring section of the Integrated Environmental Monitoring Plan (IEMP) makes no mention of monitoring Sloan's Crayfish or any threatened or endangered monitoring.

75) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix E Pg #: Figure E-11 Line #: Code: C
Original Comment #:

Comment: Based upon a review of Ohio EPA GIS data, it would appear that the figure does not accurately portray Tc-99 contamination at the site. Please revise the document appropriately.

76) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: App. F Pg #: F-5 Line #: General Code: C
Original Comment #:

Comment: Will the RTRAK be able to detect a hot spot at 3 X FRL? (at what confidence).

Appendix A

The following comments (77-30) are from a summary of a July, 1996 conference call between Ohio EPA, DOE and FERMCO. Reference: DOE FEMP, MSL 531-0297, HAMILTON COUNTY, OU1 & OU2 SEDIMENT AND EROSION CONTROL DRAWINGS 91X-5900-G-00233, 00234, 00237 AND 75X-5900-G-00455, 00456, July 1, 1996 to Mr. Johnny Reising.

77) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawing 91X-5900-G-00237 Pg #: Line #: Code:
Original Comment #:

Comment: Check dam detail does not conform to Rainwater and Land Development guidelines. Use of hay bales is not considered acceptable.

Response: Check dams will be constructed per Rainwater and Land Development guidelines.

Action:

Ohio EPA Comments
 September 4, 1996
 Page 16

- 78) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Drawing 91X-5900-G-00237 Pg #: Line #: Code:
 Original Comment #:
 Comment: Silt fence fabric should conform to fabric properties in Rainwater and Land Development guidelines, unable to determine fabric properties from drawing.
 Response: Specifications of silt fence fabric will be checked to assure conformance with specifications in Rainwater and Land Development guidelines.
 Action: Errors in silt fence fabric specifications in Rainwater and Land Development guidelines found and corrected, fabric essentially similar to ODOT 712.09 Geotextile Fabrics, Type C Sediment Fence.
- 79) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Drawings 91X-5900-G-00233 & 00234 Pg #: Line #: Code:
 Original Comment #:
 Comment: Reason for installation of silt fence along railroad unclear. Position does not follow contour and appears to function as diversion to flow from railroad directing flow to drainage ditch through culvert at section 1 G00240.
 Response: Flow will be verified to assure that water does not flow along RR side of fence and into drainage ditch untreated.
 Action:
- 80) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Drawings 91X-5900-G-00233 & 00234 Pg #: Line #: Code:
 Original Comment #:
 Comment: Flow into sediment pond may short circuit flowing directly to outlet without allowing sufficient settling time. Recommend the installation of baffles per Rainwater and Land Development guidelines.
 Response: Baffles will be installed per Rainwater and Land Development guidelines.
 Action:
- 81) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Drawings 91X-5900-G-00233 & 00234 Pg #: Line #: Code:
 Original Comment #:
 Comment: Ditch improvements should be scheduled so that work progresses in sections from downstream to upstream, stabilizing each downstream section prior to beginning work on the next section.
 Response: Ditch improvements will be scheduled as indicated.
 Action:
- 82) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Drawings 91X-5900-G-00233 & 00234 Pg #: Line #: Code:

Ohio EPA Comments
September 4, 1996
Page 17

Original Comment #:

Comment: Dimensions of sediment pond need to be shown in the drawings.

Response: Dimensions will be shown as indicated.

Action:

- 83) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawings 91X-5900-G-00233 & 00234 Pg #: Line #: Code:
Original Comment #:
Comment: Drawing need to show location/type of indicator to show level at which sediment must be cleaned.
Response: A suitable indicator will be installed and labelled, painted stripe is acceptable.
Action:
- 84) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawings 75X-5900-G-00455 & 00456 Pg #: Line #: Code:
Original Comment #:
Comment: Show sediment pond dimensions on drawings.
Response: Dimensions will be shown as indicated
Action:
- 85) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawings 75X-5900-G-00455 & 00456 Pg #: Line #: Code:
Original Comment #:
Comment: Silt fence appears to be used as a diversion mechanism rather than using diversion ditches. Special precautions must be taken to prevent lateral flow along fence from eroding base of fence.
Response: Fence will be checked for erosion at foot during weekly stormwater inspections.
Action:
- 86) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawings 75X-5900-G-00455 & 00456 Pg #: Line #: Code:
Original Comment #:
Comment: Drawings need to show location/type of indicator to show level at which sediment must be cleaned.
Response: A suitable indicator will be installed and labelled, painted stripe is acceptable.
Action:
- 87) Commenting Organization: Ohio EPA Commentor: DSW

Ohio EPA Comments
September 4, 1996
Page 18

Section #: Drawings 75X-5900-G-00455 & 00456 Pg #: Line #: Code:

Original Comment #:

Comment: Assure that ODOT 712.09 type C fabric properties are equivalent to fabric properties in Rainwater and Land Development guidelines (e.g. ODOT UV exposure strength 70% using ASTM D 4355 equivalent to Rainwater and Land Development guidelines strength 90% using ASTM-G-26).

Response: Specifications of silt fence fabric will be checked to assure conformance with specifications in Rainwater and Land Development guidelines.

Action: Errors in Rainwater and Land Development guidelines corrected, see comment #21.