

5803

U-004-305 .42

**CONDITIONAL APPROVAL OF THE OU #2 REMEDIAL  
INVESTIGATION REPORT**

08/01/94

USEPA            DOE-FN  
17  
COMMENTS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

5803 H-5177

AUG 4 10 21 AM '94

5803

REPLY TO THE ATTENTION OF:

AUG 01 1994

Mr. Jack R. Craig  
United States Department of Energy  
Feed Materials Production Center  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705

HRE-8J

U-004-305.41

RE: Conditional Approval of the  
OU #2 Remedial Investigation  
Report

Dear Mr. Craig:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the revised Operable Unit (OU) 2 Remedial Investigation (RI) Report. U.S. EPA still disagrees with several of the United States Department of Energy's (U.S. DOE) conclusions regarding interpretation of the data. However, editorial text changes can address these concerns.

Therefore, U.S. EPA hereby approves the RI report pending incorporation of appropriate responses to the attached comments into the RI report. U.S. DOE must submit responses to comments and highlighted change pages within thirty (30) days receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions.

Sincerely,

James A. Saric, Remedial Project Manager  
Technical Enforcement Section #1  
RCRA Enforcement Branch

Enclosures

cc: Tom Schneider, OEPA-SWDO  
Pat Whitfield, U.S. DOE-HDQ  
Don Ofte, FERMCO  
Jim Thiesing, FERMCO  
Paul Clay, FERMCO

(WARNER (R))  
ACTION RESPONSE  
to R-1807  
(8113)

000001













Commenting Organization: U.S. EPA Commentor: Saric  
Section #: 4.2.4 Page #: 4-94 Line #: 10 to 22  
New Specific Comment #: 6

Comment: Blaming poor well construction in the adjacent perched aquifer well 1037, U.S. DOE rejects detection of uranium isotopes, strontium-90, and carbon disulfide in well 2037 in an attempt to support the argument that the landfill is not affecting the GMA in terms of these constituents. The data presented seems to suggest that well 1037 is screened in the GMA and not in the perched aquifer. If this is true, then the argument that contaminated perched groundwater has reached the GMA (in the area of well 2037) via well 1037 is not relevant. U.S. DOE should provide further evidence that the contamination observed in well 2037 is not resulting from the Solid Waste Landfill.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: 4.2.5 Page #: 4-95 Line #: 17 to 18  
New Specific Comment #: 7

Comment: The summary lists surface soil COCs by elemental names, instead of by isotopes, as is done in the supporting text. For consistency, COCs should be summarized in terms of their specific isotopes.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: 4.2.6 Page #: 4-97 Line #: 7 to 13  
New Specific Comment #: 8

Comment: The text states that uranium, thorium, or strontium-90 were not detected in downgradient Solid Waste Landfill GMA wells. However, strontium-90 was detected above background in both downgradient wells, and uranium 235/236 was detected in downgradient well 2947. This discrepancy and its implications should be addressed in the text.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: 4.3.2 Page #: 4-100 Line #: 26 to 27  
New Specific Comment #: 9

Comment: The text states that surface soil contamination has resulted from the K-65 slurry trench and spillage from the haul roads. Without direct evidence of these contamination pathways, surface soil contamination via aeolian transport of contaminated sludges cannot be ruled out as sources. Also, it is difficult to conclude that contaminants contained in steel pipes inside the trench can affect surface soils. This issue should be discussed further

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: 4.3.2 Page #: 4-127 Line #: 1 to 2  
New Specific Comment #: 10

Comment: U.S. DOE suggests that a possible scenario for the elevated subsoil radionuclide concentrations underlying the lime sludge wastes is that soils were already contaminated



Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.4.4 Page #: 4-225 Line #: 31 to 35  
 New Specific Comment #: 15  
 Comment: The text states that the cited hydropunch locations were not associated with waste materials. However, the cited hydropunch samples were collected at locations where waste is between 5 and 20 feet thick. The text should be revised to resolve this discrepancy.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.4.4 Page #: 4-234 Line #: 6 to 11  
 New Specific Comment #: 16  
 Comment: The text initially states that perched groundwater in the Inactive Flyash Pile flows through waste materials containing uranium at locations upgradient of the hydropunch locations. However, the text concludes by saying that the northern portion of the Inactive Flyash Pile may be the source of uranium contamination. The text should be revised to clarify whether uranium waste is located within the Inactive Flyash Pile or upgradient of the pile.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.4.6 Page #: 4-249 Line #: 4 to 15  
 New Specific Comment #: 17  
 Comment: This text summarizes surface water and sediment contamination at the Inactive Flyash Pile. Because metals contamination is not discussed, the text should be revised to address this contamination.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.5.2 Page #: 4-263 Line #: NA  
 New Specific Comment #: 18  
 Comment: Table 4-48B summarizes perched groundwater contamination in terms of uranium. However, the issue of metals and organic contamination has not been addressed. U.S. DOE should provide this information or should identify the issue as an outstanding data gap.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.5.2 Page #: 4-263 Line #: NA  
 New Specific Comment #: 19  
 Comment: Table 4-48B does not provide data from boring SP-7. The table should be revised to provide this information.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 4.5.2 Page #: 4-277 Line #: 1 to 2  
 New Specific Comment #: 20  
 Comment: The text cites wipe sample data to support the conclusion that contaminated materials originated from process spillage and leaking prior to being deposited in the South Field. However, this data is not provided in the

report. The wipe sample data should be provided in the revised RI report.

Commenting Organization: U.S. EPA  
Section #: 4.5.3 Page #: 4-294  
New Specific Comment #: 21

Commentor: Saric  
Line #: 1 to 5

Comment: U.S. DOE concludes, based on the presence of chloride and fluoride, that contaminated drainage water results from perched water and not from rainwater (leachate). However, the presence of high chloride levels is widely used to indicate landfill leachate contamination. The data appears to implicate percolation of rainwater filtering through waste materials (thereby forming leachate) as the dominant source of this contamination. The text should be revised to address this issue.







[RME]) via this pathway. Either the text or the table should be revised to eliminate this inconsistency.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: B.2.4A.2.3 Page #: B-2-84 to B-2-93 Line #: NA  
New Specific Comment #: 7

Comment: Table B.2-2H presents inhalation carcinogenic slope factors (CSF) and inhalation reference doses (RfD). However, EPA's Integrated Risk Information System (IRIS) currently presents only inhalation unit risks and reference concentrations. Therefore, the table should be footnoted to identify the source of the CSFs and RfDs presented in the table.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: B.2.4A.2.3 Page #: B-2-94 to B-2-99 Line #: NA  
New Specific Comment #: 8

Comment: Table B.2-2I lists constituents eliminated from further evaluation based on a comparison to preliminary remediation goals (PRG). However, the table does not list or reference the concentration that was compared with the PRG. The table should be revised to clearly present or reference the concentration that was compared to each PRG.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: B.2.4.2 Page #: B-2-116 Line #: NA  
New Specific Comment #: 9

Comment: The ingestion rate values presented in Table B.2-3A for ingestion of home produced meats and ingestion of milk do not correspond with values presented in the cited reference. These values should be reviewed and any discrepancies eliminated. Also, footnotes "l" and "m" to this table are missing. Either footnotes "l" and "m" should be added or the footnotes should be relettered appropriately.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: B.2.4.2 Page #: B-2-134 Line #: NA  
New Specific Comment #: 10

Comment: Footnote "r" is omitted from Table B.2-4B. Footnote "r" should be added to the table or the footnotes should be revised to eliminate this discrepancy.

Commenting Organization: U.S. EPA Commentor: Saric  
Section #: B.2.4.2 Page #: B-2-154 Line #: NA  
New Specific Comment #: 11

Comment: Several of the parameters presented in Table B.2-6A either could not be identified in the cited reference or conflicted with values presented in the cited reference. For example, the parameters presented in Table B.2-6A for 1,1,2-trichlorotrifluoroethane could not be found in the cited reference. Also the t\* and B values for 1,4-dioxane in Table B.2-6A (6.04E-01 and 3.80E-01, respectively) do not



