



State of Ohio Environmental Protection Agency

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Southwest District Office

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Dayton, Ohio 45402-2911 Maureen O'Connor, Lt. Governor
Christopher Jones, Director

August 6, 2001

Mr. Johnny Reising
U.S. DOE FEMP
P.O. Box 398705
Cincinnati, OH 45329-8705

RE: 2000 ISER COMMENTS

Dear Mr. Reising:

Ohio EPA has reviewed DOE's 2000 Integrated Site Environmental Report (May 2001) and included comments.

If there are any questions, please contact me at (937) 285-6466 or Donna Bohannon at (937) 285-6543.

Sincerely,

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

cc: Jim Saric U.S. EPA
Terry Hagen, Fluor Daniel Fernald
Francis Barker, Tetrattech
Ruth Vandegrift, ODH
Mark Schupe, HSI Geotrans

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2000 Integrated Site Environmental Report
May 2001, 51350-RP-0015, Rev. 0, Final.

Comments:

1. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: NA Code: C
Comment: The ISE Report seems to present itself in the form of a compliance-based report and less "public" oriented. The past expectations of this report has been to address all stakeholders and read with a "public friendly" approach. However, it seems it has completely fallen away from this idea.
2. Commenting Organization: Ohio EPA Commentor: DSW
Section #: General Pg. #: NA Line #: NA Code: C
Comment: One of the objectives of the sites monitoring program should be to address stakeholder concerns regarding undue adverse effects to the environment. Data to support this may not be included in compliance sampling alone, yet the site appears to only address regulatory compliance issues. This is demonstrated by the focus of the annual report on compliance with regulatory limits and by the statement of objectives given at the Fernald cleanup progress briefing (July 2000) where the objectives of the IEMP were given as 1) ensure protection of public health, 2) ensure compliance with regulatory limits, and 3) provide assessment and continual feedback to remedial projects. Addressing stakeholder concern and limiting undue adverse effects to the environment was conspicuously absent. Please continue to consider this as one of the objectives of your sampling program
3. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.2/Third Bullet Pg. #: 27 Line #: NA Code: C
Comment: In the Third Bullet, it discusses that a ground penetrating radar scan was performed in an area adjacent to the SWUs. Is the text referring to the Carolina Area?
4. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.5/Fifth Bullet Pg. #: 32 Line #: NA Code: E
Comment: In the Fifth Bullet, the word "approach" is missing a letter "p."
5. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.1.3/Sixth Bullet Pg. #: 34 Line #: NA Code: E
Comment: In the Sixth Bullet, "thorium" is misspelled.
6. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.3.1.5/Gray Box Pg. #: 57 Line #: NA Code: E

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Comment: In the gray box to the left of the page, the description of the Geoprobe® and its operation stops in mid-sentence. Please complete the paragraph.

7. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 4.2 Pg. #: 70 Line #: Last line in section Code: C
 Comment: This states that no new storm water controls were installed during 2000, however, at least in the southern waste units, controls were installed for the excavation of the carolina area and some silt fence is still in place as a result of that excavation, also the installation of wells at the pilot plant drainage ditch required use of a silt fence on the northern edge of activities, silt fence and a retention basin was installed in A2P111 (radium hot spot).

8. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 4.3.1 & B.1.1.2 Pg. #: 77 and B.1-5 Line #: 2nd & 3rd paragraph
 Code: C
 Comment: Regarding the groundwater FRL exceedences in these groundwater sensitive areas, what is the status of the groundwater, with respect to these contaminants, in the vicinity of these sampling points, for example Attachment A.4 indicates that Tc-99 has not exceeded the groundwater FRL, but is it close to the FRL in monitoring wells in the vicinity of SWD-03? Do these values indicate upward trends (in groundwater or surface water) in these areas?

9. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 4.3.3 Pg. #: 81 Line #: Fig 4-8 Code: E
 Comment: The scale on the left-hand Y axis appears to be incorrect. The correct total mass of uranium discharged during 2000 was 171 kg but appears to be approximately one half that amount on the scale on figure 4-8.

10. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 5.0 Pg. #: 85 Line #: Code: C
 Comment: The second paragraph states ". . . the public *may* be exposed to radiation from the FEMP . . ." (*italics added*). The phrase "may" should be changed to ". . . the public *is* exposed to radiation from the FEMP . . ." The data presented in this report and the appendices clearly indicate that the public is exposed to radiation from the FEMP through the air pathway. The exposure is relatively low compared to NESHAPs standards, but is clearly present.

11. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 5.0 Pg. #: 90 Line #: Code: C
 Comment: The discussion in the third paragraph explaining the change in

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contribution from the different radionuclides is somewhat misleading . The discussion talks to the decrease in percentage of the uranium contribution as though uranium emissions decreased in 2000. The fact is that thorium-230 emissions increased, and became the major contributor to dose, while uranium emissions remained essentially unchanged from 1999 to 2000.

12. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 7.1 Pg. #: 116 Line #: Figure 7-1 Code: E
 Comment: The designation of "radium hot spot" could be misunderstood by the public not familiar with the remediation of that area. Perhaps a better description could be chosen, such as A2PIII Bur Reed Wetland, or something similar.
13. Commenting Organization: OHIO EPA Commentor: HSI GeoTrans, Inc.
 Section #: Attachment A.1 Pg.#: A.1-4 Line #: 6 Code: C
 Comment: How did the low water levels measured in Monitoring Wells 2625 and 2899 possibly affect the water quality? Were high turbidity levels observed in the samples?
14. Commenting Organization: OHIO EPA Commentor: HSI GeoTrans, Inc.
 Section #: Attachment A.2 Pg.#: A.2-4 Line #: 15 Code: C
 Comment: Given the close proximity of Injection Wells 22109 and 22240, re-injection probably also contributes significantly to the declining concentrations seen in Monitoring Well 3069.
15. Commenting Organization: OHIO EPA Commentor: HSI GeoTrans, Inc.
 Section #: Attachment A.6 Pg.#: A.6-9 Line #: 14 Code: C
 Comment: The text indicates that the sampling of Monitoring Well 22205 and the new up gradient monitoring well at Cell 4 is being delayed consistent with the delay in the Cell 4 construction schedule. The text should note the period of time that these wells will be monitored prior to the initial placement of impacted material in Cell 4.
16. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: B1.1 Pg. #: B.1-2 Line #: Last line Code:
 Comment: We are extremely pleased that the corrective actions (increased communication and earlier sampling per response to comment six, first quarter 2000 report) have resulted in no additional samples being missed.
17. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: B.1.1.4 Pg. #: B.1-5 Line #: Last Code: C
 Comment: There appears to be an ongoing issue with the north drainage ditch

and the rail yard. The consensus appears to be that increased turbidity is coming from this area for unknown reasons. Also, increases in total uranium seem to be coming into the ditch from the landfill. Considering these issues, it appears as though stating that any additional controls or changes are warranted may not be prudent. It would appear as though further investigation may indeed be needed and perhaps additional controls in these areas. Also further investigation may be warranted in the areas that have exceeded groundwater FRLs rather than depending entirely on the groundwater remediation, for example the Tc-99 result, was that from a leaking BSL pipe or possibly some other cause. It would seem as though some additional investigation to answer these kinds of questions would be initiated.

18. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: C-4 Pg. #: C.4-1 Line #: Last paragraph Code: C
 Comment: The last paragraph, the third sentence in particular, is unclearly stated regarding the Thorium-230 data. The text explains that most of the data is undetectable. However, the paragraph then jumps right into listing the reasons why a larger percentage of the Thorium-230 data is also undetectable. Rather, the text should explain the possibilities (i.e., WP activities) of why the rest of the Thorium-230 data **shows** a small increase in concentrations. Then provide the reasons why a portion of the Thorium-230 data is undetectable and, in addition, gives cause too **not** being able to evaluate the increase in concentrations of Thorium in the produce data with a high degree of confidence. As it reads, it's difficult to comprehend what is exactly being said, especially from a "public review" standpoint.
19. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: C-4 Pg. #: C.4-2 Line #: First paragraph Code: E
 Comment: In the first paragraph, first sentence, replace the word "locally" with "local."
20. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: C-4 Pg. #: C.4-1 Line #: 2nd Bullet Code: E
 Comment: The second sentence in the second bullet is unclearly stated. The sentence states . . . "the thorium-230 component will tend to cause doses due to the consumption of produce to be higher than historical values." The sentence should be changed to . . . "the thorium-230 component will tend to cause doses to be higher, from consumption of produce, than historical values."

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