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**OHIO EPA COMMENTS ON THE PSP FOR
ADDITIONAL WELL INSTALLATION AND WELL
ABANDONMENT**

07/08/93

OEPA/DOE-FN

9

COMMENTS

OU5



State of Ohio Environmental Protection Agency

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LOG G-04651
FILE A.R.
LIC#

- 4596

JUL 12 8 33 AM '93

George V. Voinovich
Governor

July 8, 1993

Mr. Jack R. Craig
Project Manager
U.S. DOE FEMP
P. O. Box 398705
Cincinnati, Ohio 45239-8705

Dear Mr. Craig:

Attached are Ohio EPA comments on the PSP for Additional Well Installation and Well Abandonment. If you have any questions about these comments please contact Tom Schneider or me.

Sincerely,


Graham E. Mitchell
Project Manager

GEM/bjb

- cc: Jenifer Kwasniewski, DERR
- Tom Schneider, DERR
- Mike Proffitt, DDAGW
- Jim Saric, U.S. EPA
- Dennis Carr, FERMCO
- Lisa August, GeoTrans
- Jean Michaels, PRC
- Robert Owen, ODH

*(VERACE(D)
PARTIAL
ACTION RESPONSE
to DOE-2184-93
(6377)*

Ohio EPA Comments
on
PSP for Add. Monitoring Wells Inst.

1. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.0 Pg #: 2 Line #: ¶ 1 Code:
Original Comment #:
Comment: Soil samples should be collected from the screened
interval and sampled for uranium. This data will be useful for the
planned rate/attenuation study.

Response:
Action:

2. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.1 Pg #: 3 Line #: ¶ 2 Code:
Original Comment #:
Comment: How is lateral movement distinguished from vertical
movement?

Response:
Action:

3. Commenting Organization: Ohio EPA Commentor:
Section #: 3.1.1 Pg #: 3 Line #: Code:
Original Comment #:
Comment: This section fails to discuss the proposed RCRA well to
be installed immediately east of the STP. The RCRA well is an
essential data point for the OU5 RI as well as for determining if
additional removal activities are necessary at the STP. As a part
of this PSP, DOE should ensure the RCRA well is installed and
sampled by August 1, 1993.

Response:
Action:

4. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.1 Pg #: 9 Line #: ¶ 3 Code:
Original Comment #:
Comment: A map illustrating the ground water plume should be
included.

Response:
Action:

5. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.1 Pg #: 9 Line #: ¶ 4 Code:

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Original Comment #:

Comment: How will the thickness of the weathered clay be determined for drilling purposes? Will the boring be advanced until the grey clay is encountered?

Response:
Action:

6. Commenting Organization: Ohio EPA Commentor: M. Proffitt
Section #: 3.1.1 Pg #: 9 Line #: ¶ 4 Code:
Original Comment #:
Comment: The Ohio EPA recommends continuous split spoon sampling for this effort.

Response:
Action:

7. Commenting Organization: Ohio EPA Commentor:
Section #: Table 3-4 Pg #: 12 Line #: Code:
Original Comment #:
Comment: The table title refers to "pCi/L" for chemical constituents. The table should be corrected.

Response:
Action:

8. Commenting Organization: Ohio EPA Commentor: M. Proffitt
Section #: 3.1.2 Pg #: 13 Line #: ¶ 1 Code:
Original Comment #:
Comment: The quantity of ground water discharge should also be characterized.

Response:
Action:

9. Commenting Organization: Ohio EPA Commentor: M. Proffitt
Section #: 3.1.2 Pg #: 14 Line #: Fig 3-4 Code:
Original Comment #:
Comment: If perched ground water flows from the north to the drainage ditch, the proposed monitoring wells will not be placed so as to represent this flow scenario. Two (2) Series 1 monitoring wells would be needed in the area between the Biosurge lagoon and monitoring well 11068 in order to characterize ground water flow.

Response:

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Action:

10. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.2 Pg #: 14 Line #: Fig 3-4 Code:
Original Comment #:
Comment: A scale should be added to the figure.

Response:
Action:

11. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.3 Pg #: 15 Line #: ¶ 1 Code:
Original Comment #:
Comment: What is meant by "plugged and abandoned"? Were the wells
abandoned in accordance with the QAPP and OAC 3745-9-10?

Response:
Action:

12. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.3 Pg #: 15 Line #: ¶ 1 Code:
Original Comment #:
Comment: What are the distances between the existing/abandoned
wells and their replacements?

Response:
Action:

13. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.3 Pg #: 15 Line #: ¶ 1 Code:
Original Comment #:
Comment: Why were these monitoring wells abandoned?

Response:
Action:

14. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.3 Pg #: 15 Line #: ¶ 1 Code:
Original Comment #:
Comment: What is meant by "average ground water data elevation
contours"? The dynamic nature of ground water prohibits averaging
over time. If a single ground water measuring event does not
exist, then the ground water levels should be measured and new maps
prepared.

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Response:
Action:

15. Commenting Organization: Ohio EPA Commentor: M.
Proffitt

Section #: 3.1.4 Pg #: 15 Line #: ¶ 1 Code:

Original Comment #:

Comment: Monitoring wells which are physically damaged should be abandoned within hours of the discovery of damage. These monitoring wells offer a preferential pathway of contaminant migration which DOE is fully responsible for. It is in DOE's best interest to properly abandon these wells as soon as technologically possible.

Response:
Action:

16. Commenting Organization: Ohio EPA Commentor: M.
Proffitt

Section #: 3.1.4 Pg #: Line #: ¶ 1 Code:

Original Comment #:

Comment: What is the distance between well 1350 and well 11074?

Response:
Action:

17. Commenting Organization: Ohio EPA Commentor: M.
Proffitt

Section #: Pg #: 16 Line #: Fig 3-5 Code:

Original Comment #:

Comment: A scale should be added to figure 3-5.

Response:
Action:

18. Commenting Organization: Ohio EPA Commentor: M.
Proffitt

Section #: Pg #: 17 Line #: Fig 3-6 Code:

Original Comment #:

Comment: A scale should be added to figure 3-6.

Response:
Action:

19. Commenting Organization: Ohio EPA Commentor: M.
Proffitt

Section #: 3.1.4 Pg #: 18 Line #: ¶ 1 Code:

Original Comment #:

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Comment: What is the distance between well 11075 and well 1174?

Response:
Action:

20. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.6 Pg #: 18 Line #: ¶ 1 Code:
Original Comment #:
Comment: Is there sufficient data to support the location of till
vs the location of waste in the waste pit area so that monitoring
wells can be placed in till and not in waste?

Response:
Action:

21. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: Pg #: 20 Line #: Fig 3-8 Code:
Original Comment #:
Comment: A scale should be added to figure 3-8.

Response:
Action:

22. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.6 Pg #: 21 Line #: ¶ 1 Code:
Original Comment #:
Comment: How will the borings be plugged and abandoned?

Response:
Action:

23. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.1.7 Pg #: 22 Line #: ¶ 1 Code:
Original Comment #:
Comment: This proposed investigation does not address ground water
contamination along the length of 18" line. Contaminated water
could have leaked out of any/all of the joints along the length of
the line.

Additional monitoring wells or a hydropunch investigation should be
used to assess this problem.

Response:
Action:

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24. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.2.1 Pg #: 23 Line #: ¶ 2 Code:
Original Comment #:
Comment: What is DCR 71?

Response:
Action:

25. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.2.1 Pg #: 23 Line #: ¶ 3 Code:
Original Comment #:
Comment: The three digit nomenclature used here is not consistent with the rest of the document, nor is it consistent to figure 3-10. This should be revised.

Response:
Action:

26. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.2.1 Pg #: 24 Line #: Figure 3-9 Code:
Original Comment #:
Comment: This map should be extended to show the entire plume.

Response:
Action:

27. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.2.3 Pg #: 26 Line #: ¶ 2 Code:
Original Comment #:
Comment: Split Spoon samples should be taken continuously.

Response:
Action:

28. Commenting Organization: Ohio EPA Commentor: M.
Proffitt
Section #: 3.2.4 Pg #: 27 Line #: ¶ 2 Code:
Original Comment #:
Comment: How will rising and falling water levels over time affect the placement of the monitoring well screen?

Response:
Action:

29. Commenting Organization: Ohio EPA Commentor: M.

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Proffitt

Section #: 3.2.4 Pg #: 27 Line #: ¶ 3 Code:

Original Comment #:

Comment: Split spoon samples should be collected continuously.

Response:

Action:

30. Commenting Organization: Ohio EPA Commentor:

Section #: 3.2.1 Pg #: 27-28 Line #: 4th para Code:

Original Comment #:

Comment: The section refers to "DCR 71 in 1991". Additional detail as to the title of this document should be provided. This could be provided in the text or within a reference section.

Response:

Action:

31. Commenting Organization: Ohio EPA Commentor:

Section #: 3.2.5 Pg #: 27-28 Line #: Code:

Original Comment #:

Comment: A portion of text appears to be missing between pages 27 and 28. The text should be corrected.

Response:

Action:

32. Commenting Organization: Ohio EPA Commentor: M.

Proffitt

Section #: 3.2.4 Pg #: 28 Line #: ¶ 2 Code:

Original Comment #:

Comment: Because well 3084 has acted as a conduit for contaminant migration into the type 3 aquifer, DOE must now initiate an investigation to determine the extent of this contamination.

Response:

Action:

33. Commenting Organization: Ohio EPA Commentor: M.

Proffitt

Section #: 3.2.6 Pg #: 32 Line #: ¶ 3 Code:

Original Comment #:

Comment: Lithologic samples should be taken continuously.

Response:

Action:

34. Commenting Organization: Ohio EPA Commentor:

Section #: 7.1.2 Pg #: 18 Line #: Code:

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Original Comment #:

Comment: The fact that DOE has not pre-determined which wells generate potential RCRA waste purge water is disconcerting. If DOE has conducted a sufficient review of historical data for selecting new well locations, such a review should also define which wells will likely generate RCRA waste. DOE must make this determination prior to installing and sampling wells.

Response:

Action:

35. Commenting Organization: Ohio EPA Commentor:

Section #: 7.1.3 Pg #: 18 Line #: Code:

Original Comment #:

Comment: Appendix K of the SCQ does not specifically address contact waste. DOE should provide a more detailed discussion of contact waste handling and disposition or provide a more specific reference to the SCQ.

Response:

Action: