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R-009-207 .74

**DOE FEMP MSL#531-0297 SP DMEPP - COMMENTS**

07/15/94

OEPA            DOE-FN  
3  
COMMENTS



Comment: The report documents that pump wells 3926, 3927, and 3928 are well outside of the 5 ug/L total uranium plume. It appears that by continuing to pump these wells, DOE will promote the migration of uranium in a southeasterly direction, thereby expanding the uranium plume. What is the benefit of continuing to pump these wells?

Response:

Action:

4.) Commenting Organization: Ohio EPA Commentor: GeoTrans

Section #: Pg #: Line #: Code: M

Original Comment #:

Comment: DOE should use their SWIFT model to simulate the effects of turning the pumps off sequentially in wells 3928, 3927, and 3926 beginning with the easternmost well. If the model results show no unexpected negative impacts, DOE should consider turning the pumps in these wells off sequentially and monitoring the aquifer response after each well is turned off. If the desired capture zone is maintained without promoting uranium migration into relatively clean areas, why continue pumping these wells?

Response:

Action:

5.) Commenting Organization: Ohio EPA Commentor: GeoTrans

Section #: Pg #: Line #: Code: M

Original Comment #:

Comment: Greater detail of simulation results should be included. The results from the simulation model are presumably from the uppermost model layer. No results from the other model layers are presented. Please provide complete SWIFT input data files for both the 1989 model calibration and the 1993 model calibration including the 300 gpm extraction wells.

Response:

Action:

6.) Commenting Organization: Ohio EPA Commentor: GeoTrans

Section #: Pg #: Line #: Code: M

Original Comment #:

Comment: Were wells 3916 (model layer 4) and 3918 (model layer 6) sampled or were hydraulic heads measured in these wells during the monitoring period?

Response:

Action:

7.) Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 4.0 Pg #: 4-1 Line #: para 3 Code: e

Original Comment #:

Comment: Change "263.574 million gallons per day to "263.574 million gallon."

Response:

Action:

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8.) Commenting Organization: Ohio EPA Commentor: DDAGW  
 Section #: 5.3 Pg #: 5-32 Line #: Figure 5.2-6 Code:  
 Original Comment #:

Comment: This figure implies that monitoring well 3924 is in a zone with uranium concentrations below 5 ppb. The figure needs to be revised to reflect the western component of the uranium plume.

Response:

Action:

9.) Commenting Organization: Ohio EPA Commentor: DDAGW  
 Section #: 6.0 Pg #: General Line #: Code:  
 Original Comment #:

Comment: Production wells 3924 and 3925 appear to be achieving the project goal of capturing ground water with uranium concentrations in excess of 20 ppb. However, production wells 3926, 3927 and 3928 are capturing ground water with concentrations far below this goal.

Based upon the information in this report, it appears that the highest concentrations of uranium are in the western portion of the capture system. Additionally, the conditions present in the aquifer system are more conducive to influencing the Paddys Run Road Site plume than originally thought. As a result, the Ohio EPA recommends the installation of at least one more capture well to the west of 3924 and the cessation of pumping in wells 3926, 3927, and 3928. The capture system should be pumped at a rate sufficient to effect capture, yet low enough to eliminate any impact on the PRRS plume. By placing the pumping wells relatively close together, the capture zone can be maximized while keeping pumping rates at a minimum.

Response:

Action:

If you should have any questions, please contact Mike Proffitt or me.

Sincerely,



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

cc: Jim Saric U.S. EPA  
 Ken Alkema, FERMC  
 Robert Owen, ODH  
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