6810 U-007-407 .12

RESPONSES TO DOE COMMENT RESPONSES - OU5FS/PP

04/17/95

OEPA DOE-FN
8
RESPONSES

6810 AR

OhioEPA

State of Ohio Environmental Protection Agency

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FILE: 6446.665

George V. Voinovich
Governor

April 17,1995

RE: DOE FEMP
MSL#531-0297
HAMILTON COUNTY
RESPONSES TO DOE
COMMENT RESPONSES
OU5FS/PP

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

Dear Mr. Craig:

This letter provides as an attachment Ohio EPA's comments on DOE's March 23 1995 submittal, "Draft Final Feasibility Study Report and Proposed Plan for Operable Unit 5 and Response to Comments Document". Ohio EPA is available to meet with DOE in order to develope a timely response and incorporation of these comments into a final document.

If you should have any comments , please contact Tom Ontko or me.

Sincerely,

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

cc w/att: Jim Saric, U.S. EPA
Terry Hagen, FERMCO
Ruth Vandergrift, ODH
Mike Proffitt, DDAGW
Sharon McClellan, PRC
Manager, TPSSU,DERR/CO
Lisa August, GeoTrans

(jantke(rj)
partial
ACTION RESPONSE
TO doe-0743-95
(8775)

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OHIO EPA COMMENTS ON THE OU5 PROPOSED PLAN

1) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: PP Pg #: 1 Line #: Code: c
Original Comment #:
Comment: The term environmental media is defined in a very limiting way. Perhaps the wording could be changed to: "The term environmental media *includes* groundwater,..."
Response:
Action:

2) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Introduction Pg #: 2 Line #: First sentence Code: c
Original Comment #:
Comment: This sentence is ambiguous. A reader may conclude that there is only one Proposed Plan. Suggested rewording: "Proposed Plans are being issued for each of the Operable Units. This Proposed Plan for OU5 is the fourth to be issued."
Response:
Action:

3) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Scope of OU5 etc. Pg #: 2 Line #: last bullet Code: c
Original Comment #:
Comment: The phrase "generated treatment residuals" hasn't been defined.
Response:
Action:

4) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: PP Pg #: 2 Line #: definitions Code: c
Original Comment #:
Comment: In the definition of **Operable Unit**, omit the words "environmental issues or". This vague term confuses the definition. Similarly, in the next paragraph, omit the words "level description"; they add redundancy to the definition.
Response:
Action:

5) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: PP Pg #: 2 Line #: Code: e
Original Comment #:
Comment: The second paragraph of the **Agency Involvement** section has a semicolon (;) that should be a comma. Please edit to read, "health and the environment, summarizes..."
Response:
Action:

6) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Scope of OU5 etc. Pg #: 3 Line #: last sentence Code: c

Original Comment #:
Comment: "Lower cleanup levels typically... resulting in increased costs for a given remedial alternative." This phrase can be interpreted to mean lower in the sense of " lower concentration" and also lower in the sense of "lower level of protection". Ohio EPA suggests using the term "lower concentration cleanup levels".
Response:
Action:

7) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Sidebar Pg #: 11 Line #: Volatile Organic sidebar Code: c
Original Comment #:
Comment: Methane is probably not the best choice of an example for a VOC. Ohio EPA suggests using 1,2-dichloroethane because it appears in Table 2.
Response:
Action:

8) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Human Health Evaluation Pg #: 12 Line #: Last line on page Code: c
Original Comment #:
Comment: This sentence is unclear. It can be interpreted to mean one family that lives both on and off the site. Suggest replacing the phrase "members of a farm family " with "the members of farm families".
Response:
Action:

9) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Human Health Evaluation Pg #: 13 Line #: first bullet Code: c
Original Comment #:
Comment: The term "fugitive dust" has not been defined.
Response:
Action:

10) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Summary of Remedial Alternatives Pg #: 20 Line #: second sentence from bottom of page Code: c
Original Comment #:
Comment: " As part of the selected remedy DOE has committed to EPA to investigate and apply , if appropriate, reinjection." It is Ohio EPA's understanding that DOE's committed to exploring a much more extensive range of innovative technologies such as pulse pumping, lixiviant injection, etc. Please rephrase this sentence so that these methods don't appear to be excluded from consideration.
Response:
Action:

11) Commenting Organization: Ohio EPA Commentor: OFFo
Section #: Alternative 2C-Off-site Shipment Pg #: 24 Line #: last sentence, first

paragraph Code: c
Original Comment #:
Comment: "Remediation levels consistent with Alternative 2A were adopted for this alternative also." The use of the term "remediation level" in this context appears to be synonymous with "risk level". Perhaps it would be more clear to use the term " risk level" in this context. It may not be obvious to the public that the columns in the "Summary of Alternatives " tables actually correspond to different risks.
Response:
Action:

12) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Compliance with ARARs Pg #: 31 Line #: fourth and fifth lines from bottom of page Code: c
Original Comment #:
Comment: "Additionally, background concentrations of these constituents in groundwater exceed the MCL." Ohio EPA is confused by this statement. According to the OU5 RI, Table 4-8 the 95th percentile background concentrations for arsenic(0.26mg/L[filtered] and 0.029[unfiltered]) and radium-226(1.90pCi/ L [filtered] and 1.5pCi/L [unfiltered]) and radium-228 (ND [filtered] and 3.6pCi/L [unfiltered]).
We fail to see how the concentration of either isotope of radium exceeds the proposed MCL of 20pCi/L.
We are concerned that the sample distribution arsenic is neither normally nor log-normally distributed and even more concerned that the arsenic in the filtered samples is statistically higher than in the unfiltered samples. This result seems counter to logic.
We note that the background groundwater quality (Tables A-8 and A-9 in the" Characterization of Background Water Quality for Streams and Groundwater" [DOE FEMP May 1994]) in the Dry Fork background wells is in the range of 0.002 U to 0.004 mg/L and that the Shandon background wells are listed as 0.004 to 0.042 mg/L.
We also note in Table A-2 of the previously referenced document that arsenic concentrations in private wells were all listed as <0.010mg/L with the exception of one detect at 0.016 mg/L.
Finally, we would like to note that Table 6-4 "Summary statistics of filtered inorganic constituents for background monitoring wells in the GMA" lists the nonparametric 95% UCL as <0.003 mg/L. We are concerned that statistical artifacts can lead to a skewed interpretation of the GMA's water quality.
Response:
Action:

13) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Compliance with ARARs Pg #: 32 Line #: 2 Code: c
Original Comment #:
Comment: The term "material-specific WACs" has not been defined. It is Ohio EPA's understanding that the WACs are strictly concentration -based and are independent of the media involved and the chemical form of the contaminants. This understanding is based on our February 23 meeting in Chicago as well as public comments on the OU2 proposed plan.
Response:
Action:

14) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Compliance with ARARs Pg #: 32 Line #: 4 Code: c
Original Comment #:
Comment: In addition to groundwater, please give another example of an indicator medium. Ohio EPA is having difficulty conceptualizing environmental media that are useful in demonstrating and evaluating the continued performance of the disposal system. It is easier to conceptually imagine the monitoring of the disposal system itself and using that as an indicator of disposal system performance. For example, in practice one would monitor the leachate detection system (or visually inspect the disposal cell cap) to evaluate performance. These actions would give a quicker indication of system failure than would a down gradient monitoring well(or discovering contaminants in soil or surface water run-off).
Response:
Action:

15) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Preferred Remedial Alternatives Pg #: 36 Line #: sixth bullet Code: c
Original Comment #:
Comment: Please define RME in a sidebar.
Response:
Action:

16) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Groundwater Pg #: 41 Line #: first paragraph Code: c
Original Comment #:
Comment: Ohio EPA would like stronger reassurances that water would be treated to the maximum extent and in the most efficient manner consistent with the design of the expanded AWWT facility. In other words, it should be explicitly stated here that compliance with the 20ppb discharge limit is a necessary but not sufficient criteria. Contaminated water would be treated to the design capacity of the AWWT facility and more highly contaminated water would be preferentially treated before the treatment capacity would be expended on less contaminated water. It is not acceptable to Ohio EPA to blend contaminated water with less contaminated water in order to avoid treatment.
Response:
Action:

17) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Storm Water and Wastewater Pg #: 41 Line #: second sentence Code: c
Original Comment #:
Comment: Storm water runoff should be controlled until after restoration (that is until a vegetative cover has been established) has been completed. Ohio EPA's concerns about surface water quality are not limited to uranium, but also extend to silt and suspended solids.
Response:
Action:

18) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Decontamination and Demolition Pg #: 41 Line #: last sentence Code: c
Original Comment #:

Comment: Ohio EPA believes that DOE's commitment to remove well casings to the extent practical is too weak. After the wells are no longer needed , they should all be over-drilled (or otherwise removed) and permanently sealed.
Response:
Action:

19) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Site Wide Integration of Remedies Pg #:43,44 and 45 Line #: Code: M
Original Comment #:
Comment: Ohio EPA agrees with DOE's inclusion of a discussion of the risk reduction achievable through implementation of the desired remedy. However we believe that there are many potential questions left unanswered in the discussion of the risk reduction presented here.
Why is the total non-carcinogenic risk post-remediation so much lower on-site than off-site?
Why is the ILCR to the off-property farmer only reduced by barely half after an enormously expensive and very long cleanup?
Why is the Total Carcinogenic Risk to the post-remediation off-property resident farmer only listed as 1.1x10-3? It is common knowledge that a persons risk of getting cancer is greater than that.
Why is there no discussion of background risk?
Ohio EPA suggests rewriting this entire section with these types of questions in mind. We suggest considering removing the background risk from the figures.
Response:
Action:

OHIO EPA COMMENTS ON THE OU5 FS RESPONSE TO COMMENTS

240a) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2-6 Pg #: Table Line #: Code: c
Original Comment #: 31
Comment: Ohio EPA disagrees with the contention that the total trihalomethane standard is not an ARAR. The chemical substance is relevant here, not whether it originates from chlorine disinfection in a water treatment system.
Response:
Action:

256) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Original Comment #: 67
Comment: It is Ohio EPA's understanding that during the February 23 meeting in Chicago that DOE made the commitment that the WAC for on-site disposal of uranium was to be fixed at 1030 ppm regardless of the chemical or physical form of the uranium. Ohio EPA will concur with this response if the clarification is made that the inorganic constituents referred to on line 17 page 4-39 of the text are "non-radioactive inorganic constituents" or similar language. There should be on opportunity for the reader to infer that, for example, legacy wastes (or hold-up material) can be treated to achieve a WAC and then disposed of on site.
Response:
Action:

286) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Original Comment #: 98
Comment: This response minimally address our concerns that innovative technologies be evaluated during the RD/RA process. We also cannot fail to note that "brickmaker' technology is not even mentioned in the FS text.
Ohio EPA also is concerned by the phrase in the "**Response**" "other than as a support technology for materials that fail to meet the WAC". Please refer to the previous comment about Ohio EPA's understanding of the uranium WAC.
Response:
Action:

277) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: c
Original Comment #: 65
Comment: Based upon the facts that the sump stored hazardous wastes, and was filled to a volume above the floor drain pipe inlet, and the inlet piping was still connected to the sump, and that the video survey of the piping revealed solids remaining therein, Ohio EPA believes that the ancillary piping acted as a storage unit. If DOE maintains the position that the associated piping is not a part of the unit, please provide Ohio EPA with a detailed justification at the earliest convenient date.
Response:
Action: