5177

OHIO EPA COMMENTS AND QUESTIONS ON THE CONCEPTUAL SITE TREATMENT PLANS

02/17/94

OEPA/DOE-FN
5
COMMENTS

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

H-2397
AR

-5177

George V. Voinovich
Governor

Donald R. Schregardus
Director

February 17, 1994

John Sattler
U.S. DOE - Fernald
P.O. Box 398704
Cincinnati, OH 45239-8704

Dear Mr. Stattler:

The following are Ohio EPA's collective comments and questions on the Conceptual Site Treatment Plans and our expectations for inclusion of additional information into the Draft Site Treatment Plans.

General:

1) Please keep in mind that the comments relating to the CSTPs are very general in nature due to a necessary lack of detail in the STPs at the conceptual stage.

2) One of the most important components of the draft STPs will be the updated versions of the Table 8.2 found in the CSTPs. The refinement of this table and narrowing of treatment options must proceed with caution. Each option in the CSTP that is ruled out **must** have a reason(s) for being ruled out, and this reasoning has to be included in the draft STP. It is of utmost importance that sites do not prematurely narrow their focus to one type of treatment at this stage (especially the larger sites). All sites must continue to make a concerted effort to consider small scale, diverse, and innovative treatment and disposal technologies.

3) All sites must consider on-site treatment options as a first priority, and only after the elimination of these options has been sufficiently justified are the sites to consider off-site treatment.

4) Disposal options for any waste treatment residues **must** be included in the draft site treatment plans. They were not included in the Conceptual Site Treatment Plans as discussed at various NGA meetings. It is unrealistic to eliminate disposal options from the plans, when in fact, the majority of the waste at some sites will be disposed of. Volume of residues after treatment that will require disposal, if known, must be included, as well as anticipated interim management of those residues.

5) All plans will require an increased level of detailed information in many of the areas discussed under Section 2.0 (Methodology), and Section 3.0 (Low-Level Mixed Waste Streams). DOE sites must ensure that specific waste streams are adequately characterized so that the selected treatment technologies will be adequate to treat mixed wastes to the appropriate LDR technologies and that the proper treatment facilities are funded and constructed to treat the appropriate waste streams and volumes. Where further characterization is needed, sites should begin to construct schedules for characterization to be included in the draft STPs.

Battelle

1) In section 1.2.1, Site History, Page 3 - The CSTP indicates that 15 buildings or portions thereof and "related external areas" have become radioactively contaminated. Does this contamination extend to mixed-waste issues? The draft STP should further describe these "related external areas" by including them, at a minimum, on a map.

2) Section 1.2.3, Project Mission, page 4 - Please include in the draft STP a description of how verification of decontamination will be accomplished for areas of soil contamination adjacent to contaminated buildings. Will this verification be conducted by the same entity who will be conducting an independent verification survey for all building decontaminations?

3) Section 1.2.5, Waste Management Operations, page 7 and Section 2.3 Treatability Groups, page 20, fourth paragraph - This portion of the CSTP references the storage of waste. Because the BCLDP will not be storing low-level mixed waste prior to shipment off-site, the word **storing** should be replaced with the word **accumulation** to avoid the implication that low-level mixed waste will be accumulated for greater than ninety days. This applies to any other sections of the plan where storage is discussed as well.

4) Section 1.5, Other Activities Related to CSTP Development, pages 15 and 16 - Is a record or a log being maintained which includes the name/affiliation/telephone number/address/response received, etc. for those groups or individuals who have raised questions or requested information about the site? This type of information should be documented for future reference.

5) Page 28 - This chart should be titled

6) Section 7.0, Mixed Waste Streams for which Radionuclide Separation May be Appropriate - This section will have to be expanded in the draft STP so that mixed waste streams are identified by RCRA waste codes, radionuclide content and waste form. The estimated cost of treatment and disposal with and without radionuclide separation should be included as well.

Fernald

1) The main comment we have is that Table 8.1 will need to be refined. The draft STP should begin to present a clear and concise proposal for matching DOE-FEMP waste streams with appropriate treatment technologies and justifications provided.

2) Section 2.5.2, pg. 21, indicates that there are waste streams which have not been adequately characterized and references Section 3.4 for additional information. Section 3.4, pages 31 and 32, identifies three sources of these waste streams which may require further characterization (Uranium Interference; HWMU Review; Additional Wastes to be Characterized). DOE-FEMP should complete characterization of these waste streams before submittal of the DSTP. IF this cannot be accomplished prior to submittal, the DSTP should describe the waste streams (rather than the sources) and include a schedule for completing the characterization.

3) The CSTP indicates that DOE's ReOpt technology database was a primary reference utilized to identify treatment options. If "ReOpt" is used for the DSTP, the plan should include some discussion of the ReOpt database in terms of the criteria upon which options are identified, its credibility, and its capability.

Mound

1) The primary comment is that Mound should concentrate efforts and resources on characterization of mixed wastes so that treatment options can be evaluated more effectively and efficiently.

2) Page 12 of the CSTP lists NDE/NDA under the definition of "characterization." To what do these acronyms refer?

3) What is the planned outcome of the glass drained periodically from Mound's Glass melter unit, assuming it receives required permits and goes on line as planned? (page 15)

4) Page 26 of the CSTP refers to the possibility that some mixed wastes may be considered solely radioactive if lead levels are less than 5 ppm by weight. Established TCLP levels are not based on relative weights.

5) Reference is made on page 24 to Mound's intentions of constructing a special building in which uncharacterized mixed wastes will be open and sampled. More detailed information should be supplied in the draft STP on this building.

6) The plan provides no details about how a proposed biodegradation process would be used for treating scintillation vials. Also, does DOE plan to conduct treatment activities via use of the Packed Bed/Silent Plasma Discharge Unit at the Mound plant? Neither of these technologies are referenced in the Permit application.

Portsmouth

1) DOE has stated that wastes generated by the United States Enrichment Corporation (USEC) by July 1, 1993, but stored in DOE-owned and operated storage facilities at PORTS have been included in the CSTP. However, those wastes generated by USEC after July 1, 1993 and stored by DOE will not be included in the DSTP or STP. Which entity will be responsible for submitting the DSTP and STP for those wastes, and what is the relationship between DOE and USEC in storing used generated wastes?

2) DOE-PORTS has mentioned that funds for waste characterization may be limited in the near future, and that waste will not be fully characterized for three or four more years. How will treatment alternatives be chosen if characterization work required will take up to four years and funding is uncertain?

6) What is the basis for DOE Headquarters' twenty-year cut-off for treatment technology?

7) DOE states that radioisotope separation will increase treatment costs. Will it, however, decrease disposal costs?

8) Incineration at Oak Ridge is considered on-site treatment in Table 8.2. Why is this the case?

RMI

1) RMI is planning to dispose/treat all of its waste at off-site facilities. Various types of mobile treatment units should be investigated and utilized if feasible.

Sincerely,

Michael Savage
Assistant Chief
Division of Hazardous Waste Management

cc: Jennifer Tiell, Dir's Office
Mark Navarre, Legal, CO
Tom Winston, Chief, SWDO
Paul Pardi, DHWM, SWDO
Chris Cotton, DHWM, SWDO
Pat Willoughby, DHWM, SWDO
Phil Harris, DHWM, SWDO
Donna Goodman, DHWM, SEDO
Adrienne LaFavre, DHWM, NEDO
Dave Chenault, DHWM, SEDO
Graham Mitchell, DERR, SWDO
Ken Dewey, SEDO
Debbie Strayton, CDO
Lundy Adelsberger, DHWM, CDO
Linda Welch, Chief, DHWM
Melda Rafferty, PORTS
John Sattler, Fernald
Sam Cheng, Mound
Tom Baillieul, Battelle
Louise Watson, RMI
Jerry Boese, Ross & Associates
Andy Kubalak, DHWM, CDO
Jim Payne, AGO
Rod Beals, NEDO
Jeff Hines, SWDO
Frank Popotnik, DHWM, NEDO
John Thomasian, NGA
Marilyn Stone, DOE HQ