



State of Ohio Environmental Protection Agency

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FERNALD
LOG K-1932
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FILE: George V. Voinovich
LIFE: Governor

July 2, 1997

RE: DOE FEMP
COMMENTS: DRAFT FINAL
DECISION METHODOLOGY

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Dear Mr. Reising:

This letter provides Ohio EPA's comments on the "Draft Final Decision Methodology for Fernald Material Disposition Alternatives" dated May 8, 1997. The Ohio EPA has been a strong advocate of the beneficial recycling of FEMP materials. We agree with many of the simplifications that have been incorporated into the methodology and we concur with the addition of a threshold phase. We are dismayed that costs are used to screen during the threshold phase and then are again considered during the Life Cycle Analysis Phase. A methodology that was initially planned to incorporate intangible benefits into the decision process has slowly evolved into a method which continues to place overwhelming emphasis on costs at the expense of intangibles. Our more detailed comments follow:

1. We agree that the addition of a threshold phase will effectively incorporate core values up-front of the process. We agree that protectiveness and ARAR compliance should be threshold criteria. Likewise, we agree that deletion of the off-site disposal options is appropriate.
2. The use of the 25% screen in the threshold phase and the use of costs again in the Life Cycle Analysis Phase counts the costs twice. Intangibles like institutional and local social preferences will not be considered if alternatives have been screened by costs. If the cost threshold is retained, costs could be weighted more lightly during the Life Cycle Analysis Phase.
3. The outcome of the decision phase will rely heavily on the performance measure weighting scheme that DOE has selected. Stakeholders are unable to provide comment on this critical issue because the weighting scheme was not presented in the revised methodology. Please provide DOE's weighting scheme for public comment.
4. An example that incorporates all three phases should be developed and distributed. This example should include a section describing how the multi attribute decision theory was applied, the sensitivity analysis results, and the cross-over points that were identified. A table of costs for the "key steps" in each disposition alternative and the estimated annual costs should also be supplied. Such a table would permit the reader to determine if all important costs have been considered and to help the reader understand why some alternatives are much more expensive than others.
5. There is limited opportunity for stakeholder input in applying the decision methodology

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PARTIAL ACTION
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- to OU3 materials at Fernald. Stakeholder input only has the potential to affect decision-making at the life cycle analysis phase. Stakeholder input is again minimized in the third phase because DOE has established a weighting scheme for the performance measures that appears to allocate more importance to cost and scheduling considerations.
6. Cost is a crucial element in the decision process. Therefore, the method used to determine the net present value (NPV) of costs for each alternative becomes critical. Estimated annual costs become extremely important when the net present value (NPV) is calculated. The September 1996 "Plant 4 Approach, Assumptions and Data for the Application of the Fernald Decision Methodology..." document assigned equal costs to each year in which the alternative is implemented. If the initial costs are higher than future costs, which is likely if there are any capital investments involved, a different NPV value than the one presented in the "Plant 4 Application" document, would be obtained. Future decision documents should include a more realistic annual cost scenario. (If an analysis of each "key step" of a disposition alternative is to be performed, as is stated on page 3 of the revised decision methodology, a more detailed cost analysis should be feasible. Better estimates of annual costs should result in more realistic calculations for the NPV of cost values.)
 7. Executive Summary, second page. If the methodology uses cost as an initial screen, why does the methodology state that funding/budget issues could veto a disposition alternative selected using this process? Assuming that the least cost alternative has been selected, as the methodology as applied at Fernald appears to have done, how would response to funding issues result in the selection of a more costly alternative?
 8. Section 3.1.2, Unit Cost, p. 8. What is gained from calculating the unit cost for each alternative if this value is not to be used in the decision analysis? The unit cost, as described in the methodology, should be just as representative of relative cost as the NPV costs. Unit costs are also more "reader friendly" and provide a practical frame of reference. Perhaps these unit costs should be used in the decision phase of the analysis instead of total NPV costs.
 9. Section 3.2, Schedule Impacts, p. 8. How will acceleration of the schedule (a possibility listed in the methodology) be represented in a score? Would this be presented as "negative days" of schedule impact?
 10. Section 4.4, Off-Site Metal-Melt and Restricted Reuse, p. 12. What are the "key policy decisions," mentioned at the bottom of page 12, that would affect implementing the recycling alternative? This statement is presented without further clarification.
 11. The Ohio EPA has performed preliminary calculations on the costs to recycle the forty uranium mill rolls. These rolls were discussed at the public meeting held June 24 in the context of the disposal of over-sized material in the OSDF. Using disposal costs presented at the meeting and decon and survey costs presented in Approach, Assumptions and Data for the Application of the "Fernald Metals Disposition Methodology" to the Plant 4 Category Accessible Metals dated September 1996, we calculated that it is

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roughly *twice* as expensive to recycle as it is to dispose in the OSDF. These rolls are an obvious and "best case" candidate for recycling based on their large mass to surface area ratio. If these rolls can not pass the 25% cost threshold, it is very unlikely that Fernald will recycle any scrap steel.

The authors made it a point to mention that the methodology is subject to change in the future. As always, the Ohio EPA is available to discuss the implementation and revisions to this methodology. We look forward to discussing this methodology at the public meeting scheduled for July 8.

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

Sincerely,



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

- cc: Jim Saric, U.S. EPA
- Terry Hagen, FDF
- Ruth Vandergrift, ODH
- Mike Proffitt, DD&GW
- Bob Geiger, PRC
- Manager, TPSS/DERR, CO
- Dave Ward, HSI GeoTrans