

Oak Ridge Reservation Environmental Management
Site Specific Advisory Board
3 Main Street
Oak Ridge, Tn 37830

March 26, 1996

Mr. Rod Nelson
Assistant Manager for Environmental Management
Department of Energy Oak Ridge Operations
P. O. Box 2001
Oak Ridge, TN 37831

Dear Mr. Nelson:

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) approved the attached recommendations and comments on the Draft Prioritization of Fiscal Year 98 Environmental Management Projects.

The items included in the attached recommendations and comments are based on review of the available documents. In the future, with more time, our findings should display increasing insight.

The ORREMSSAB appreciates the opportunity that you and your staff have provided for comments on the 1998 EM Prioritization Process. The Board is equally optimistic that you will receive these comments as being constructive and that you will incorporate them in an obvious manner. Please provide the Board with a date by which we can expect to receive written responses from you or your staff.

While the ORREMSSAB takes no position on the comments from individual stakeholders, we strongly endorse reasoned consideration of their comments by DOE.

Mr. Rod Nelson

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We trust that all comments received by your office, along with your responses, will be transmitted to DOE-Headquarters.

Sincerely,

Bob Peelle

R. Peelle, Chair
ORREMSSAB

RP/sb

Enclosure

**Recommendations
On the Draft Prioritization
of FY 98 Environmental Management Projects**

**Oak Ridge Reservation Environmental Management
Site Specific Advisory Board**

March 25, 1996

The recommendations in this report are grouped into three categories: (I) The process used to develop the priorities for 1998; (II) the documentation and presentation of the process during February 1996; and (III) the resulting draft project priority list distributed and explained February 8 and 22, 1996, to groups of interested citizens.

On November 15, 1995, the ORREMSSAB was introduced to the concept of the Environmental Restoration Benefit Assessment Matrix (ERBAM) presented as a risk-based prioritization method for Environmental Restoration projects. On February 8 and February 22, 1996, a majority of ORREMSSAB members attended the DOE-Oak Ridge Operations (DOE-ORO) public meetings where the Management Evaluation Process was presented as a consistent risk-based methodology to determine the priority of Environmental Management (EM) activities. An ORREMSSAB Prioritization Committee was formed at the ORREMSSAB meeting of February 21, 1996 to study the prioritization materials. Eight Prioritization Committee meetings were held during the first three weeks of March, 1996. During the ORREMSSAB meetings of March 6 and March 13, successive preliminary committee reports were discussed. At the ORREMSSAB meetings on March 13 and March 25, the comments and recommendations were reviewed by the ORREMSSAB prior to approval.

We find in general that:

- There was an attempt to solicit stakeholder comment. However, due to the time schedule imposed on the process and the methodology of the process, public participation was limited.
- The combination of Environmental Restoration and Waste Management projects into a single list is beneficial from the standpoint of a more holistic understanding of the Oak Ridge Reservation (ORR) cleanup.

- The use of the Management Evaluation Process represents an improvement over previous methods for budget prioritization. However, we point out some shortcomings in the approach in later sections.

ORREMSSAB members supplemented their review of the Draft Prioritization Document with review of associated material as well as personal knowledge of some project areas and management tools. The plausibilities of the likelihood and severity data used by DOE were scanned and the risk-based methodology was studied during the month and a half that we had the data.

We also reviewed and discussed the questions and suggestions submitted to DOE by other groups and members of the public (see Attachment I.) We believe that these are important and are pleased that DOE plans to respond to each comment. DOE will find that some of the points made by others are contained within or closely related to the comments prepared by the ORREMSSAB. We believe such concurrence highlights areas of particular concern. Moreover, there are additional interested individuals and groups that could contribute to prioritization efforts in subsequent years.

I. THE PRIORITIZATION PROCESS

It is appropriate that DOE uses the prioritization process as guidance, recognizing that the results are relative rather than absolute.

- Although the ORREMSSAB accepts that DOE retains the option of rearranging the priorities after the initial ranking based on other considerations, we believe that such "judgement calls" should be identified in the final document, perhaps in a comment column. Examples of this that have been mentioned to us are: cases of mortgage reduction; the application of a "Small Site Strategy" to rapidly eliminate the existence of stand-alone, widely separated contaminated sites as a matter of reducing overall costs; and the increased priority given to maintenance of the general infrastructure of the K-25 Site - a task which was not highly rated by the method.
- The method used to establish scores does not appear to be logically sound. DOE should attempt to obtain a supportable method with documentation. For example, both direct off-site economic impacts and impacts to future

generations appear to be under weighted. Nonmarket values should be included. The method should include these areas as they are some of the chief incentives for environmental restoration. In future years, documentation of the method should include sensitivity analysis to illustrate how much the rankings change as the method is altered. Otherwise, the attentive public may distrust the method even for use to generate a first approximation ranking.

- Because an approximate method of this type is conceptually complex, independent peer review of the method should be required and made available to the public along with any DOE response.
- The ORREMSSAB believes that the guidelines established for determination of the severity and likelihood of potential impacts of projects are too subjective and result in inconsistent measurement of the magnitude of an impact. Differences exist in individual's interpretations of risk. Therefore, efforts should be made to ensure consistency in manager's interpretations of severity and likelihood. Guidelines should be as objective as possible. Efforts to ensure consistency should be communicated to the public.
- We recommend independent peer review of the likelihood and severity data be continued as standard practice. The review should be directed towards data quality, data consistency, data usage, and data credibility. The results of this activity now conducted by contractors should be clearly communicated to the public and external independent review should be included. We recommend ORREMSSAB be included in this process.
- Scoring methods for all projects at each operations office should be consistent and the results should be used as a first approximation to establish the relative priorities for EM funding to the various operations offices. This recommendation does not imply that there should be no adjustment of the estimated funding after project ranking, only that these adjustments should be for stated reasons.
- We recommend in the future that projected land use and population data, as well as current data, be used.
- The ORREMSSAB believes that DOE has a perpetual and nontransferable obligation to address environmental problems caused by activities on the Oak Ridge Reservation (ORR) that impact surrounding communities. The

prioritization process should be modified such that issues in these surrounding communities are addressed as expeditiously as are problems that occur on the ORR.

- The ORREMSSAB also recommends that DOE: (1) include a member of the ORREMSSAB at the DOE-ORO EM Prioritization Board scoring sessions and (2) convene a workshop at the start of the prioritization process for members of the ORREMSSAB and other interested organizations and public.

II. PRIORITIZATION DOCUMENTATION

The ORREMSSAB found the document "DOE-ORO Draft Prioritization of Fiscal Year 98 Environmental Management Projects" was difficult to use and insufficient for a satisfactory understanding and evaluation of the prioritization list.

We believe attention to the following items would facilitate use of the document by the public:

- include a thorough written description of the Management Evaluation Process, including references to supporting information (e.g., Management Evaluation Matrix Training Package and Reference Material);
- include a glossary and a list of acronyms and abbreviations;
- revise the prioritization lists to include information on:
 - specific compliance authority (e.g., FFA, CERCLA, RCRA)
 - project location (e.g., Portsmouth, Paducah, ORNL, Y-12, K-25)
 - better titles (e.g., more descriptive, consistent from year to year, consistent with Federal Facility Agreement titles)

- status of the project (e.g., feasibility study, proposed plan, engineering evaluation/cost analysis, action memorandum, Record of Decision; if in progress, percent complete)

- fewer columns of planning dollars (e.g., consider deletions of the cumulative columns for defense, non-defense, and decontamination and decommissioning);

- local economic effects.

- remove the federal salaries and program management activities from the top of the prioritization list. A footnote to the list could explain administrative costs approximating 10 percent of the available must be subtracted from the expected total funding;
- require and include complete risk data sheet project scope summaries for all projects (R94A0059, R94F0001 and R95M0028 are good examples);
- include stakeholder input on the risk data sheet project scope summaries;
- arrange project scope summaries by management evaluation matrix rank rather than by risk data sheet numbers;
- include work package planning forms for major projects in the document and provide remaining work package planning forms as an appendix;
- include comments about any changes between budget years in project titles, recombination of activities within a project or other changes in the risk data sheet project summaries, and note that there are such changes on the prioritization list;
- include a brief project history with dates, on the risk data sheets, activity data sheets or elsewhere so that the information is available to the public;
- include funding history of projects on the risk data sheets, activity data sheets or elsewhere (i.e., actual dollars spent and/or planning dollars for the life of the projects);

- include a brief summary of EPA, TDEC, and DOE negotiations for compliance projects that are below the estimated funding level;
- provide a master list of all projects (funded and unfunded, including those not listed) that includes activity data sheet and risk data sheet numbers, management evaluation matrix ranking (including before risk score and the "delta" or difference), and ERBAM and Waste Management prioritization (if applicable in future years); and
- develop and implement a quality assurance program for consistency of data among lists (e.g., the project ranking list, the project category weights list, and the project scope summaries.) Several examples of errors which, while not critical, detract from the inspection of the document and also its overall credibility are listed below:

- Page 3 (#31). "Mixed Waste Private Sector Support" is designated as R96G0011; but in the tabulation of Project Scopes on page 122, the risk data sheet is given as R96G0015.

-Page 3 (#47). The risk data sheet on page 72 shows mercury release will be reduced from 17 to 5 grams per day by December 31, 1998. This reduction will be completed after Lower East Fork Poplar Creek has been cleaned up. DOE should reduce releases to the creek in conjunction with cleanup of the creek. See R94C0005 which states cleanup is completed one year earlier.

-Page 61 (#21). The risk data sheet shows the Sampling and Analysis Plan for Bear Creek Operable Unit was completed November, 1994. However, this budget states it is four years later before a risk evaluation is done, which seems to be an excessive time period.

-Page 130 (R960003). "K-25 Mixed Waste Treatment and Disposal" states "all project management is included in this activity." We find this consistent with the concept of project budgeting, but question whether this is done consistently across all projects in the budget.

-Page 131 (R96Q0006 and R96Q0002). Both of these project scopes as written appear to relate to the High Ranking Facilities

Project. We believe the project scope for R96Q0006 should read "Isotope Facility", not "High Ranking."

III. THE RELATIVE RANK OF 1998 EM PROJECTS

The ORREMSSAB finds that the amount of money anticipated for FY 98 EM work would be inadequate to perform the tasks required. We also believe that ORO has returned unspent funds to DOE-HQ each of the past few years. We believe strong actions need to be implemented to prevent loss of needed funds in the future. Otherwise, we find little to comment on regarding the relative ranking of the listed projects. However, we repeat that the presentation and lack of availability of data prevented a definitive assessment. We reviewed the integrated priority list against those criteria which are most compelling (e.g., fixed costs for administration, surveillance and monitoring, maintenance, waste treatment, storage and disposal; compliance; and other desirable activities.)

We found that within an expected budget cut-off of \$650M, about 52 percent of the funding goes to fixed cost activities, about 23 percent to compliance projects, and about 22 percent to other desirable projects. The remaining three (3) percent is for projects that data were unavailable in the project scope list. Thus, there is little room for giving high priority to additional items.

While we recognize the priority of and need for the tasks which were ranked above the target budget of \$650M, we have a concern that there is not more actual clean-up activity planned for FY 98. (i.e., there is less "moving of dirt" than we would desire.) Specific projects which at this point appear to be below the anticipated budget cut-off and which we feel should be undertaken are:

- those which have strong regulatory drivers or which have been specified in the FFA; and
- the activities at David Witherspoon and Atomic City Auto Parts. These should be expedited and completed. There are perceptions of equity and fairness involved in these projects, as well as a need to demonstrate DOE commitment to complete a task once initiated.

Our review of the projects within the \$650M cut-off also raises the question of how DOE presently funds unanticipated situations related to environmental restoration and waste management. Is there a reallocation of the \$650M to cover emergencies so that

the lower ranking projects are delayed or is the total budget adjusted and the prioritization process reinitiated? Such contingencies should be explained in the prioritization process methodology. We believe that DOE should develop a systematic approach to the funding of unexpected situations.

Attachment I

Public Comments Reviewed

1. Bob Peelle February 22, 1996
2. Mary Bryan February 15, 1996
3. Local Oversight Committee March 5, 1996
4. Larry J. Tucker February 22, 1996
5. Herman Weeren February, 1996
6. Mary Harman February 22, 1996
7. Jim Harless February, 1996
8. John Wade February, 1996
9. Terry Weaver Revised March 25, 1996

Attachment II

References Reviewed

1. DOE-Oak Ridge Operations, Draft Prioritization of Fiscal Year 98 Environmental Management Projects
2. DOE - Office of Environmental Management. Environmental Restoration Risk-Based Prioritization Work Package Planning and Risk Ranking Methodology. June 1995. Revision. ES/ER/TM-112/R2.
3. DOE - Office of Environmental Management. Oak Ridge Reservation Site Management Plan for the Environmental Restoration Program. September 1995. DOE/OR-1001/R4.