



## Department of Energy

Oak Ridge Operations Office  
P.O. Box 2001  
Oak Ridge, Tennessee 37831—

January 18, 2002

Mr. Luther Gibson  
Chair  
Oak Ridge Site Specific Advisory Board  
P.O. Box 2001, EM-90  
Oak Ridge, TN 37831

Dear Mr. Gibson:

### **RESPONSE TO RECOMMENDATION: COMMENTS ON THE PROPOSED PLAN FOR INTERIM REMEDIAL ACTIONS FOR SELECTED CONTAMINATED SOIL, MATERIAL, AND BLAIR QUARRY WITHIN ZONE 1, EAST TENNESSEE TECHNOLOGY PARK, OAK RIDGE, TENNESSEE (DOE/OR/01-1997&D3)**

Enclosed you will find the letter transmitting the *Interim Remedial Actions for Selected Contaminated Areas Within Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee* (DOE/OR/01-1997&D1). Enclosed with the letter is a copy of the Board's comments and other public comments received on this document and DOE's response to these comments.

Thank you for your continued advice and recommendations. If you have questions, you may contact Pat Halsey (576-4025) of my staff.

Sincerely,

*Lori Fritz*  
Lori Fritz, Acting Assistant Manager for  
Environmental Management

cc w/enclosure:

Pat Halsey, EM-922, ORO  
Jim Kopotic, EM-911, ORO  
Myrna Redfield, EM-91, ORO  
Connie Jones, EPA 4  
John Owsley, TDEC



## Department of Energy

Oak Ridge Operations  
P.O. Box 2001  
Oak Ridge, Tennessee 37831—

October 31, 2001

Ms. Martha Berry  
U.S. Environmental Protection Agency  
Region 4  
Atlanta Federal Center  
Atlanta, Georgia 30303-3104

Mr. Randy Young  
DOE Oversight Division  
Tennessee Department of Environment  
and Conservation  
761 Emory Road  
Oak Ridge, Tennessee 37830-7072

Dear Ms. Berry and Mr. Young:

### ***RECORD OF DECISION FOR INTERIM REMEDIAL ACTIONS FOR SELECTED CONTAMINATED AREAS WITHIN ZONE 1, EAST TENNESSEE TECHNOLOGY PARK, OAK RIDGE, TENNESSEE (DOE/OR/01-1997&D1)***

The Department of Energy (DOE) has enclosed for your review and comment two copies of the *Record of Decision for Interim Remedial Actions for Selected Contaminated Areas within Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-1997&D1)* (ROD), which includes the Responsiveness Summary. Also enclosed is a copy of the proposed Administrative Record (AR) Index for your review and comment. Transmittal of this document fulfills the agreement to submit this D1 ROD document by October 31, 2001, to the Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) for review and comment.

With the exception of the groundwater issue discussed below, all issues and comments received from EPA in letters dated August 1 and 9, 2001, have been incorporated into this document. Several core team meetings and discussions were held to resolve and agree to the information provided in this D1 ROD. As agreed to: 1) documentation and information related to the Baseline Risk Assessment, interim calculations, and figures containing sampling locations and areas of excavations have been included in Appendices A and B; 2) language addressing land use controls, similar to the language included in the Bethel Valley ROD, has been incorporated into the ROD; and, 3) the verification sampling plan will be submitted with the Remedial Action Work Plan.

Ms. Martha Berry  
Mr. Randy Young

-2-

October 31, 2001

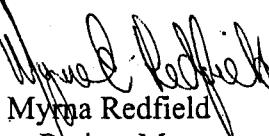
With respect to groundwater, as discussed in the ROD, the selected remedy has been modified slightly from the alternative presented in the proposed plan. Originally the Remedial Action Objectives (RAOs) included a component to minimize future impact to groundwater that would have required soil remediation levels for the protection of groundwater. DOE recognizes TDEC's and EPA's concerns regarding protection of groundwater following the remediation of the identified areas addressed in this ROD. Since the Federal Facility Agreement (FFA) parties have not agreed to groundwater use nor residual soil concentrations that would be protective of groundwater, it would be premature to address this issue in this ROD. DOE recognizes the risk that future actions may be required to ensure the protection of groundwater. Should action be necessary, DOE will take the appropriate actions to mitigate the threat to groundwater.

If you have any questions, please contact Jim Kopotic at (865) 576-9441.

Sincerely,



Donna Perez, Site Manager  
East Tennessee Technology Park



Myrna Redfield  
Project Manager  
Federal Facility Agreement  
ORR Remediation Management Group

cc w/enclosures:

Stephanie Short, DOE-HQ, EM-32, GT  
Myrna Redfield, EM-91, 55 Jefferson  
Donna Perez, EM-911, ETTP Site  
Constance Jones, EPA, Region 4  
Robert Jolley, TDEC, OR

See Page 3 for remaining cc list

Ms. Martha Berry  
Mr. Randy Young

-3-

October 31, 2001

cc w/o enclosures:

Judson Lilly, DOE-HQ, EM-32, GT  
Bill Seay, EM-91, 55 Jefferson  
M'balia Tagoe, BJC, MS-7131, Building 1580  
LOC  
SSAB

**DOCUMENT:**  
Park, Oak Ridge, Tennessee, June 2001

**DOCUMENT NUMBER:** DOE/OR/01-1936&D3

### OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period

**ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
1	General - Submitted by Oak Ridge Site Specific Advisory Board (ORSSAB)	Overall, we think the Proposed Plan outlines a thoughtful course of remedial action for Zone 1 consistent with the Department of Energy's ongoing development of the ETP for commercial enterprise, an initiative that the ORSSAB supports.	Acknowledged. DOE has invited public participation in the Zone 1 project through periodic briefings with the ORRSAB, a community-based advisory organization established to provide recommendations to the DOE on remediation decisions on the ORR. The goals and selected remedy presented in the ROD are consistent with recommendations made by the ORR End Use Working Group (EUWG), a subcommittee of the ORSSAB. DOE is committed to continuing to invite public participation throughout the completion of the Zone 1 project.
2	General - Submitted by ORSSAB	These actions represent the first wide-scale implementation of an industrial end use at the ORR. As such, a robust stewardship program incorporating effective institutional controls is an essential component of long-term protection of human health and the environment. The ORSSAB requests ongoing information about this action sufficient to allow us to evaluate the efficacy of the long-term stewardship efforts.	DOE has agreed in a Memorandum of Understanding with EPA and TDEC to comply with the Oak Ridge Reservation (ORR) Land Use Control Assurance Plan (LUCAP) whenever land use controls (LUCs), including institutional controls, are selected as part of a remedial action. Included in the LUCAP are requirements for planning implementation of each selected LUC, regular periodic monitoring of each LUC following its implementation, and annual certification by manager of DOE-ORO that each control continues to be effectively implemented. DOE is committed to stewardship and is currently preparing an ORR stewardship management plan with ORSSAB participation.

**OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM**

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period      **ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
3	Page 7, 1st Column, ETTP Remediation Strategy Sect. Submitted by the ORSSAB	ETTP is a government facility that was used to enrich uranium from 1942 until it was placed in standby in 1985 and permanently shut down in 1987.	As noted by the comment, ETTP was used to enrich uranium from 1942 until 1985. The period from 1942 to 1964 referred to in the Proposed Plan was the period when ETTP was used to enrich uranium for use in nuclear weapons. The Site History section of the Proposed Plan and the language in the ROD reflects that ETTP is a government facility that was used to enrich uranium from 1942 to 1985. The language describing the ETTP site history in the ROD is correct.
4	Page 8, 2nd Column Submitted by the ORSSAB	Please indicate which contaminants of concern principally contribute to the hazard index.	PCB 1254 in Exposure Unit 77 (Blair Quarry) is the only significant contaminant of concern that contributes to the hazard index. A statement regarding PCB 1254 as a contaminant of concern in Exposure Unit 77 has been added to the risk discussions in the ROD on page 2-26. As stated in the ROD, the exposure to radiological contamination is the primary risk associated with the Zone 1 areas included in this ROD.
5	Page 14, 1st Column Submitted by the ORSSAB	Technetium-99 is present in the scrap metal.	Technetium-99 has been detected in the K-770 Scrap Yard Area during the characterization screening performed to date. However, it is not a contaminant of concern.
6	Page 30, 1st Column, Scrap Section Submitted by the ORSSAB	The proposed change to DOE Order 5400.5 which will prohibit the recycling of scrap metal containing detectable radiation above background levels, is only one of several alternatives expected to be evaluated during preparation of a programmatic environmental impact statement.	The comment is acknowledged. However, recycling or reuse of scrap metal was ruled out as a waste management process option because it is less cost effective than disposal of scrap metal in the Environmental Management Waste Management Facility (EMWMF).

## OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period

**ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
7 General submitted by Local Oversight Committee (LOC), Citizens Advisory Panel (CAP)	The CAP does not agree with the Federal Facility Agreement (FFA) parties that remediation of the remaining FFA sites in Zone 1 should be postponed. From personal communications with involved parties, we understand that disagreement over the need for additional in-depth characterization of these sites is the reason for removing them from the Zone 1 Proposed Plan. Because the general nature and extent of contamination is already known for these sites, we see no need to postpone their remediation in order to undertake detailed and expensive characterization activities that are unlikely to change the approach to cleanup.	Postponing these sites is not a cost-effective use of limited environmental restoration funds (ref. FFA meeting notes of May 31, 2001). The CAP is concerned that Environmental Protection Agency (EPA) Region 4 continues to impose bureaucratic roadblocks during FFA deliberations that result in costly delays of remedial actions. This is not the cooperative spirit that stakeholders expect between two agencies of the Federal Government.	The baseline risk assessment was conducted on the basis of available information (from the ETTP Site-wide RI and from other sampling activities conducted to support the ETTP Rendustrialization Program). The FFA parties agreed to use unacceptable risk results as a basis for action even if there were uncertainties about the acceptability of the quantity of the data. However, EPA could not agree to use unacceptable risk results as a basis to draw conclusions for those FFA sites in Exposure Units where the baseline risk assessment did not identify a human health risk that exceeded the remediation levels established for Zone 1 or where excessive data gaps were identified. Therefore, the FFA parties agreed to proceed with interim action to allow cleanup on those areas where agreement had been reached. A cost-effective verification sampling strategy for collecting the source information necessary to determine if an unacceptable risk is present or if no action is necessary for the Exposure Units and FFA sites not addressed by this ROD will be developed and submitted with the remedial design work plan.

**OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM**

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period      **ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
8	General submitted by LOC, CAP	The Environmental Management Waste Management Facility (EMWMF) is mentioned in this document without definition, and, in particular, without any reference. This record of Decision (ROD) should be defined when first used (page 30), clearly explained in the glossary, and included in the references. As the CAP has stated in previous comments, the familiar name of this facility should be CERCLA Waste Facility, which is more closely allied with the ROD's title, "Record of Decision for the Disposal of Oak Ridge Reservation Comprehensive Environmental Response, Compensation, and Liability Act of 1980 Waste (DOE/OR/01-1791&D3)."	The ROD for the EMWMF is defined in the Zone 1 ROD in the first time it is used in Part 1 and in Part 2 (pages 1-5 and 2-27).
9	General submitted by LOC, CAP	The CAP notes and is pleased that this proposed plan approximates the proposed plan outline in "Annotated Outlines for Documents Required by FFA and CERCLA for the Oak Ridge Reservation (DOE/OR/01-1077/R1)." The End Use Working Group (EUWG) recommended three zones for the East Tennessee Technology Park. The proposed plan has reduced the number of zones to two without explanation. The reasons for the change were discussed at the public meeting, but the CAP requests that a similar explanation be included in the ROD since the EUWG recommendation is included in Appendix B of the proposed plan.	Comment acknowledged. No response needed.
10	General submitted by LOC, CAP		The designation of the impacted ETTP area into two operable units (Zones 1 and 2) is for CERCLA decision-making purposes. The three zones recommended for the impacted ETTP area by the EUWG are for the purpose of recommending future use. Therefore, the designations are not inconsistent since they are for different purposes. The human health risk-based remediation levels selected in the ROD are consistent with the EUWG recommendations for future use in Zone 1.

## OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period      **ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
11	General submitted by LOC, CAP	The CAP suggests a new table, which would give the reader an easy way to evaluate how effective the projected soil removals will be in attaining remediation goals. The table should have rows for K-901, Duct Island, Powerhouse, and K-1007 (and perhaps smaller divisions within each). The columns would be total area, number of samples, samples/unit area, and fraction of samples in which no Maximum Contaminant Levels were exceeded. The CAP also requests that information on the number of wells in which groundwater did not exceed any MCL be added to Appendix A.	The ROD provides figures that provide the following information for each Exposure Unit where risk-based remediation levels established in the ROD were exceeded: 1) all soil sample locations, 2) soil sample locations that exceeded risk-based remediation levels, and 3) the approximate surface area to be excavated. The groundwater remediation objective has been deferred to a future Comprehensive Environmental Response, Compensation, and Liability Act decision so the requested groundwater sample information is not appropriate for this ROD. However, groundwater sampling information is available in the <i>Remedial Investigation Report for the East Tennessee Technology Park, Oak Ridge, Tennessee</i> (DOE/OR/01-1778/V1-V5 & D1).
12	General submitted by LOC, CAP	The CAP reiterates that the proliferation of abstract document titles should be abandoned, this document being another case in point. The title of this proposed plan mixes media (selected contaminated soil, material) and a specific location (Blair Quarry). a straightforward alternative would be "Proposed Plan (Record of Decision) for Interim Actions in Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee."	The title of the ROD will be changed to <i>Record of Decision for Interim Remedial Actions for Selected Contaminated Areas within Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee</i> .
13	General submitted by LOC, CAP	The CAP joins with the Oak Ridge Site Specific Advisory Board in advocating a strong stewardship program for Zone 1, East Tennessee Technology Park, to give added emphasis to this important industrial end-use location on the Oak Ridge Reservation. Long-term stewardship is essential to properly monitor and oversee remediation efforts and provide protection of human health and the environment.	Please refer to the response to Comment Number 2.

OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM

NAME OF REVIEWER: Public comments received during extended 60 day comment period

ORGANIZATION: Public Comments

DATE COMMENTS TRANSMITTED: Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
14 Submitted by the LOC, CAP	Figures 2, 3, 4, and 12	<p>These figures indicate that the proposed remedial action boundary includes a large percentage of Tennessee Valley Authority (TVA) property located adjacent to the northeast section of K-901 Area. This TVA property accommodates an electrical substation. A CAP member questioned this fact during the proposed plan public meeting, but the question was not adequately answered. It is not correct to include the TVA property within the remedial action boundary. Is there contamination from ETTP on the TVA property?</p>	<p>The figures in the ROD have been revised to exclude the TVA property identified in the comment. In addition, the area of the three Exposure Units affected by the Zone 1 Boundary Change have been recalculated and the updated information is reflected in the ROD. No other changes were necessary because no interim remedial actions were proposed for the affected Exposure Units. The Poplar Creek Disposal Area, located on the TVA property, was used by ETTP for construction material storage operations and for the disposal of non-combustible building materials, concrete, asphalt, and steel in a soil matrix, prior to the transfer of the property to TVA. Combustible materials were also disposed by burning. Numerous employees were interviewed about activities there, and none were aware of any hazardous materials being disposed of at the site.</p>
15 Submitted by the LOC, CAP	Page 30, Column 1 Scrap	<p>A programmatic Environmental Impact Statement (PEIS) on the Disposition of Scrap Metals is currently being scoped for the DOE complex. This PEIS will have a significant impact on the cost and disposal decisions for all cleanups at ETTP. Please refer to this PEIS and mention the alternatives under consideration.</p>	<p>Please refer to the response to Comment Number 6.</p>
16 General submitted by LOC, CAP		<p>The Oak Ridge Reservation Local Oversight Committee (LOC) Citizens' Advisory Panel (CAP) plans to comment on the subject document. Unfortunately, due to the dates of our regularly scheduled meetings, the CAP's Environmental Management Committee will not have time to review this document and propose comments to the full CAP before the existing deadline. The LOC respectfully requests that the comment period for the subject proposed plan be extended to October 12, 2001.</p>	<p>The public comment period was extended to October 15, 2001.</p>

## OAK RIDGE PROGRAM DIVISION DOCUMENT REVIEW FORM

**NAME OF REVIEWER:** Public comments received during extended 60 day comment period

**ORGANIZATION:** Public Comments

**DATE COMMENTS TRANSMITTED:** Various

COMMENT NO.	SECT/ PAGE	COMMENT	RESPONSE
17	General Comment by citizen at public meeting	Ten feet below grade may not be adequate depth to allow construction of a basement in a commercial building if the construction would occur in an area there is a significant slope to the existing ground surface.	The 10-foot below ground surface vertical limit for soil remediation was determined to be appropriate to accommodate most construction activities (building construction or utilities work) associated with anticipated industrial development projects. However, in those cases where a future construction project will require excavation to depths greater than 10 feet below grade, the excavation/penetration permit process required as part of the land use controls will ensure that proper environmental and health and safety controls are in place prior to the initiation of construction activities.
18	General Comment by citizen at public meeting	There is an area of approximately 608 acres within the ETTP Administrative Area (5,000 acres) that lies outside the City Limits of Oak Ridge and outside of Zone 1 that was reported by Marianne Heiskell to have contamination. What is your timeframe for looking at this area?	The ETTP area that is not within either Zone 1 or Zone 2 Operable Units will be addressed under the ETTP Footprint Reduction Project. The actual date for completing the Footprint Reduction Project will depend on the availability of funding, but the current forecast is to conduct the Footprint Reduction Project site investigations in Fiscal Year 2003 or later.