



Many Voices Working for the Community

Advocate

A Preview of the Bear Creek Valley Watershed Proposed Plan

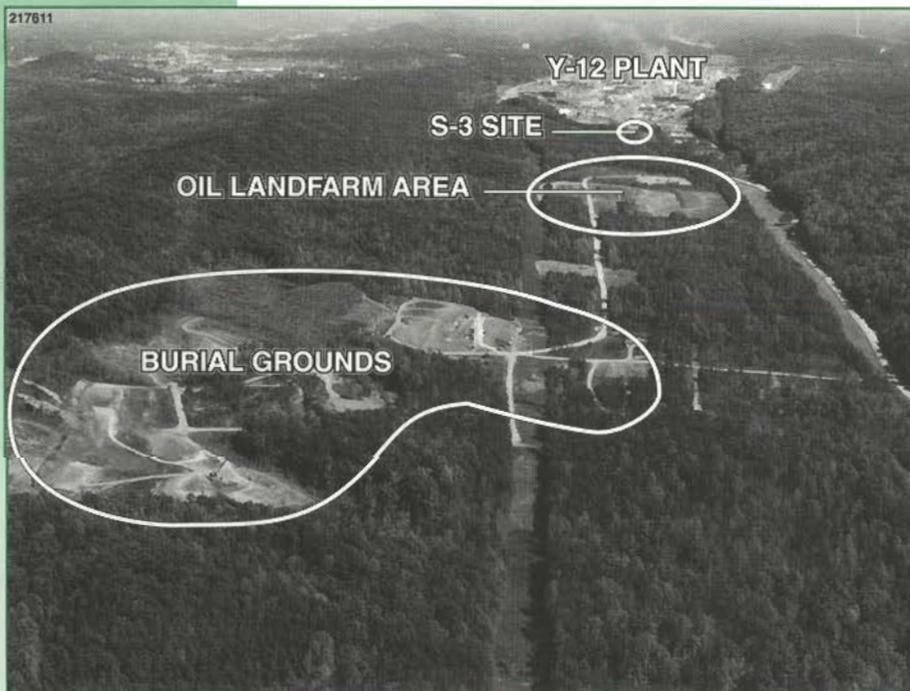
(see also "Bear Creek Valley Workshop Held" p.5)

Recently, DOE submitted a draft Proposed Plan for cleanup of specific areas within the Bear Creek Valley (BCV) Watershed to the Tennessee Department of Environment and Conservation (TDEC) and the U.S. Environmental Protection Agency (EPA) for review. The purpose of the remediation project is to clean up the waste sources and contaminated media

The Proposed Plan is one of several steps in the Comprehensive Environmental Response, Compensation, and Liability Act evaluation process for the cleanup of contaminated sites. The first step was to conduct a Baseline Risk Assessment (1) to identify and evaluate risks to human health and the ecological system and (2) to identify cleanup objectives. To facilitate this evaluation process, BCV was segmented into three zones based on potential future land use.

The Baseline Risk Assessment determined that Zone 1, the western portion of the valley, does not appear to be adversely impacted and could support residential use. Zone 2, the middle portion of BCV, has suffered some impact to groundwater but may be considered for recreational use. Zone 3, the eastern portion of BCV containing waste areas formerly used as part of the Y-12 Plant waste management system, will require continued institutional controls. These waste areas (S-3 Ponds, Oil Landfarm Area, Boneyard/Burnyard, and Bear Creek Burial Grounds) contain both liquid and solid wastes contaminated with radionuclides and chemicals. Depleted uranium is the major contaminant in the solid waste. Nitrates, volatile organic compounds, and uranium are in the liquid waste and constitute the main contaminants

in groundwater and surface water. The S-3 Ponds and Boneyard/Burnyard exhibit the greatest current risk and will be addressed in this Proposed Plan. A second Proposed Plan will be developed to select a remedy for the Bear Creek Burial Grounds, which may present a potential future risk.



Aerial view of Bear Creek Valley - Zone 3

in the Watershed in order to reduce risks to human health and the environment. Once TDEC and EPA comments have been addressed, the Proposed Plan will be issued for public comment. The tentative release date is Spring/Summer 1998 with a Record of Decision anticipated by the end of 1998.

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Project Teams Report to Board

The ORREMSSAB established five major project teams to review issues concerning specific environmental topics. These teams help prioritize projects within their respective subject areas and serve as a focal point for public involvement. Current project teams, their objectives, and activities employed to meet those objectives are highlighted below.

PROJECT TEAM	OBJECTIVES	ACTIVITIES
<p>Budget and Prioritization</p>	<p>Develop an understanding of the DOE budget and its constraints, and provide recommendations to DOE on prioritization and sequencing of Environmental Management (EM) projects based on these constraints.</p>	<ul style="list-style-type: none"> • Review and provide comments on DOE EM prioritization and sequencing documents by interacting with DOE project managers to ensure that stakeholder concerns and viewpoints are recognized, understood, and factored into decision making. • Co-sponsor and attend DOE budget and prioritization meetings. • Track and compare DOE's sequencing of projects with Board recommendations and react to any changes in prioritization or sequencing. • Represent stakeholder views on unscheduled DOE budget revisions to current year allocations.
<p>East Tennessee Technology Park (ETTP) Remediation/ Reindustrialization</p>	<p>Develop an understanding of cleanup and reuse activities at the former K-25 Site and provide recommendations to DOE on these matters.</p>	<ul style="list-style-type: none"> • Sponsor public meetings to discuss reindustrialization efforts. • Review reports and receive briefings on selected Federal Facility Agreement (FFA) documents pertaining to ETTP. • Participate on Community Reuse Organization of East Tennessee Board. • Develop guiding principles applicable to environmental management and reindustrialization at ETTP and make recommendations to DOE. • Review DOE's process of assessing current building hazards and lessen activity hazards.
<p>Federal Facility Agreement Appendix E Documents</p>	<p>Serve as a focal point for timely stakeholder review and comment on selected Appendix E documents, obtain ORREMSSAB concurrence, and provide recommendations to DOE.</p>	<ul style="list-style-type: none"> • Hold monthly meetings, open to the public, to review selected documents estimated to have the highest impact on stakeholder concerns. Examples of documents scheduled for review in 1998 include: <ul style="list-style-type: none"> —Bear Creek Valley (BCV) Watershed Proposed Plan —BCV Watershed Record of Decision (ROD) —Melton Valley Watershed Feasibility Study (FS), Proposed Plan, and ROD —Corehole 8 Plume Source Engineering Evaluation/Cost Analysis (EE/CA) —Upper East Fork Poplar Creek East End DNAPL Plume EE/CA —ORNL Main Plant Surface Impoundments Remedial Design Report/ Remedial Action Work Plan —Molten Salt Reactor Experiment Fuel and Flush Salt Removal quarterly reports —Bethel Valley Remedial Investigation/FS
<p>Technology Development and Deployment</p>	<p>Develop an understanding of DOE technology being developed or in experimental deployment and serve as a focal point for public involvement in these matters; prepare recommendations for formal ORREMSSAB action.</p>	<ul style="list-style-type: none"> • Identify needs and deficiencies in ORR environmental restoration activities. • Prioritize cleanup needs. • Study technologies available and in development suitable to address ORR cleanup needs. • Hold public workshops/meetings on technology and needs. • Promote technology development and deployment at ORR that address DOE and ORR needs. • Regularly inform Board of technology development and deployment.
<p>Equity Issues</p>	<p>Develop an understanding of the equity issue activities related to the ORR and prepare informed recommendations for formal ORREMSSAB action.</p>	<ul style="list-style-type: none"> • Presentations on disposition maps, transportation, TSCA incineration, Waste Management Programmatic Environmental Impact Statement. • Attend national conferences such as the WM 98 Conference. • Interact with other SSABs. • Understand the status of situations between ORR and State of Tennessee in conjunction with other states for final disposition of waste.

Keystone Center Aids Board

In the first year of its existence (1995-1996), ORREMSSAB members agreed to use parliamentary procedure for all Board business and decisions *except* for the final drafting and approval of recommendations to be forwarded to DOE. For those recommendations, the Board decided to use a "consensus process" almost identical to the one recommended by the Keystone Center and used successfully by the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC), a multi-party organization focusing on community involvement of cleanup issues at Federal facilities and the establishment of citizen advisory boards. Specifically, the FFERDC used the consensus process in its multi-year study of the Environmental Restoration (ER) Program at DOE. Because the FFERDC, several other SSABs, and some other national organizations were using the "consensus process" successfully, ORREMSSAB incorporated into its Standing Rules a similar consensus process for making recommendations.

Although the Board adopted the recommended consensus process and used it with varying degrees of success, its use created dissatisfaction and dissension among Board members. Many Board members came to view the consensus process (with its emphasis on unanimity or near unanimity) as "a form of tyranny." As the editors of Robert's Rules of Order point out in the book's introduction:

Robert was surely aware of the early evolutionary development of parliamentary procedure in the English House of Lords resulting in a movement from "consensus," in its original sense of unanimous agreement, toward a decision by majority vote as we know it today. This evolution came about from a recognition that a requirement of unanimity or near unanimity can become a form of tyranny in itself. In an assembly which tries to make such a requirement the norm, a variety of misguided feelings—reluctance to be seen as opposing the leadership, a notion that causing controversy will be frowned upon, fear of seeming an obstacle to unity—can easily lead to decisions being taken with a pseudo-consensus which in reality implies elements of default, which satisfies no one, and for which no one really assumes responsibility. Robert saw, on the other hand, that the evolution of majority vote in tandem with lucid and clarifying debate—resulting in a decision representing the view of the deliberate majority—far more clearly ferrets out and demonstrates the will of an assembly.



ORREMSSAB Executive Committee meeting, April 27, 1998, during discussion of changes in Bylaws and Standing Rules.

On February 21, 1998, ORREMSSAB held a Saturday workshop to discuss problems in using the consensus process. Todd Barker of the Keystone Center was invited to the workshop because of the Center's involvement as facilitators for the FFERDC. Aimee Houghton also attended the workshop because of her active participation in and work with DOE and DoD citizens advisory committees. Mr. Barker and Ms. Houghton cited examples of successful use of the consensus process in advisory boards across the country. They also noted the attributes of the process:

- reduces the possibility that "losers" or the "minority" will work to block or delay implementation of an action.
- requires people to disclose information and interests.
- implementation can be faster.
- focuses on interests, not positions.
- models cooperative behavior that may be valuable in the future.
- levels the playing field.
- is procedurally simple.

There was lively discussion among workshop attendees. While Board members agreed that recommendations to DOE should be based on consensus (agreement, the greatest level of agreement possible, or unanimous agreement), most Board members felt that consensus could be and should be arrived at through the use of parliamentary procedure rather than the use of a consensus process. In particular, Board members wanted to retain the right to vote and to have those votes cast in public and be recorded—actions that the consensus process tends to discourage. Additionally, some Board members disagreed with the attribute, as presented by Mr. Barker and Ms. Houghton, that the consensus process reduces the possibility of a minority blocking implementation of an action. These members felt the converse was true, i.e., that a single Board member could "block consensus" causing gridlock. Many Board members felt that allowing a single person or a small minority (smaller than one-third of the membership) to block consensus was unacceptable and unworkable.

The final outcome of the workshop was the agreement among Board members to rewrite the Board's Standing Rules to describe the method for arriving at all Board decisions through the use of parliamentary procedure. ORREMSSAB Bylaws and Standing Rules are available upon request by calling 423-241-3665.

A New Member's Perspective

Peter Hillis

“The tyranny of a prince in an oligarchy is not so dangerous to the public welfare as the apathy of a citizen in a democracy.”

- Charles-Louis Montesquieu

As a newly appointed member of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB), my experiences have been an eye opener. First, I've learned that our members possess a wealth of education, knowledge, technical expertise, life experiences, and personal insights on which to draw. I respect our members because their very participation in this worthy effort is evidence of each member's sincere desire to continually improve the living and working conditions for all citizens in Oak Ridge and its surrounding communities.

Second, I've learned that responsibilities of Board membership can be overwhelming. Because I do not have a scientific background, I have struggled to digest some of the technical presentations and issues under study. Additionally, it has been a challenge to learn the mechanics of how the Board conducts business, as well as to work with such a disparate group. Fortunately, I am able to tap into the reservoir of knowledge and experience resident in this Board; all members have proven to be enthusiastic mentors.

Third, the scope of the Board's task can be daunting. The number and importance of issues to be addressed is large; equal consideration is the goal but prioritization a necessity. Each project invites the questions:

- Which projects merit priority?
- When should it be done (sequencing)?
- Is the planned action scientifically sound and cost effective?

- How will the project impact the health and safety of workers?
- What benefits can the community expect from current and planned cleanup projects?
- What is the potential future use of these properties for commerce, employment, and recreational opportunities?
- Will our community be a safer and healthier place for future generations?

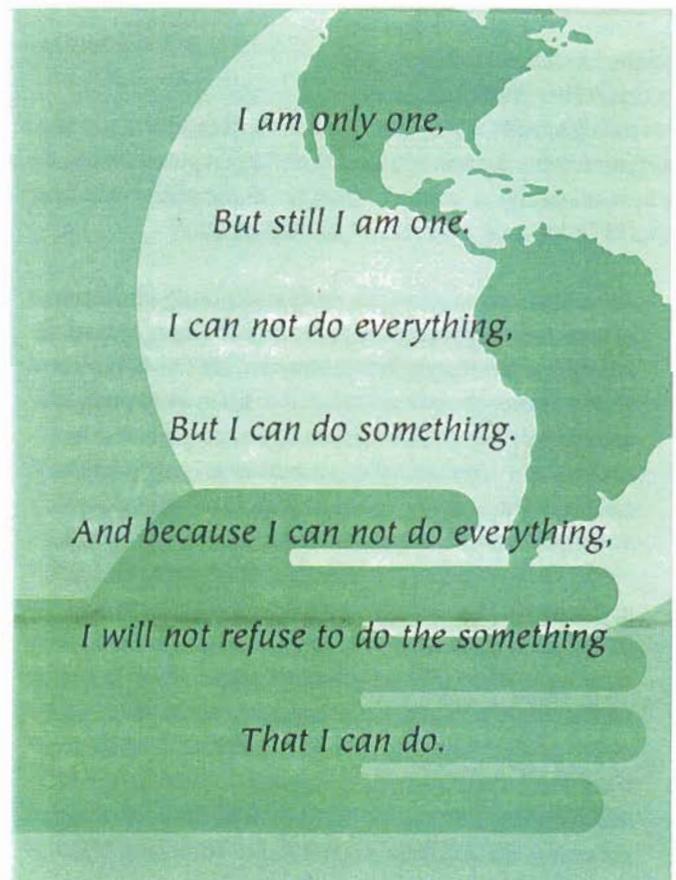
Fourth, to prioritize projects, discern possible impacts of various actions on stakeholders, ensure fairness...in short, GET THINGS DONE... public participation is vital. We (ORREMSSAB and DOE) seek and encourage public involvement. Some members of the community may hesitate to participate because of their perception that the diversity of ORREMSSAB's membership is both a strength and a weakness: diversity ensures that everyone has a voice, but sometimes the voice cannot be heard because of the collective noise. Views vary

radically. Motives are questioned. Goals are unclear or not focused. Trust is withheld between Board members and the public is skeptical, if not cynical.

As I see it, the development of mutual trust is essential to the efficacy of the ORREMSSAB. We must:

- seek wide involvement of all stakeholders,
- hear and respect all viewpoints,
- see that all aspects (equity, safety, environmental justice, community impact, etc.) are fairly addressed, and
- work together to reach reasonable solutions.

Ignoring the issues facing the ORREMSSAB and the public will not make them disappear. Shared participation gets results. Every citizen, whether a Board member or public participant, can identify with these words from Edward E. Hale:



Bear Creek Valley Workshop Held

In response to a request by stakeholders, on March 25, 1998, the U.S. Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC) conducted a workshop to discuss the proposed strategies for the remediation of the Bear Creek Valley (BCV) Watershed and for the disposal of wastes derived from cleanup on the Oak Ridge Reservation (ORR). Regulatory agency representatives fielded numerous questions from the large crowd of approximately 67 people.

BCV is divided into three zones—zones 1, 2, and 3—with proposed remediation actions addressing the particular problems in each zone. These actions and cleanup objectives are highlighted below.

The proposed waste disposal cell that may be located in the BCV Watershed caused considerable discussion. ORREMSSAB has recommended to DOE that a low-level waste disposal cell be located in BCV. A properly

constructed and regulated waste disposal cell at BCV would be less expensive and safer than transporting certain wastes to other sites at ORR or offsite. Also, uncertainty exists about DOE's ability to ship these wastes out of state to other DOE sites or to private companies permitted to accept such waste.

Other topics generating discussion included stakeholders questioning the risk assessment study done for a waste cell at BCV, the design of the proposed cell, and the cell's Waste Acceptance Criteria (WAC) necessary to ensure safe storage of waste. Of particular concern to Oak Ridge stakeholders is the approximately 40 million pounds of uranium buried in BCV, which at present is contained but may require future treatment and will require long-term institutional stewardship. Stakeholders also pressed for: 1) another public meeting, possibly in May, to discuss the WAC for the waste disposal cell and 2) at least one stakeholder having full membership on the working group already established by DOE, EPA, and TDEC to address stewardship and institutional control.

Meeting Schedule

Board Meetings: First Wednesday of each month, 6–9:30 p.m. Locations may vary, but are advertised in local media and registered on the information phone line and in the Federal Register.

Project Team Meetings: Generally scheduled during the second week of each month.

All Meetings are open to the public: For exact times and locations, call the dedicated information phone line (423) 576-4750.

ACTIONS	CLEANUP OBJECTIVES		
	Establish recreational area in Zone 2 and residential area in Zone 1	Protect industrial worker in Zone 3	Protect populations of ecological receptors at valleywide level
Remove Boneyard/Burnyard hot spots	Removes wastes that are leaching uranium into NT-3 and Bear Creek, reducing uranium that reaches Zone 2 via Bear Creek	Incidental benefit	Reduces contaminants entering surface water in NT-3 and Bear Creek
Treat shallow contaminated water before surfacing into upper reaches of Bear Creek, NT-1, NT-7, and NT-8	Reduces contaminants entering these tributaries from S-3 and the Burial Grounds, reducing contaminants reaching Zones 1 and 2 via Bear Creek	Incidental benefit	Reduces contaminants entering upper reaches of Bear Creek; NT-1, -7, and -8; and migration to Zones 1 and 2 via surface water and/or groundwater
Isolate waste areas, i.e., cap	Reduces rain infiltration and contaminants that may leach into adjacent surface water and be transported into Zones 1 and 2 via Bear Creek	Protects maintenance and industrial workers from exposure to waste.	Caps prevent contact with waste
Disposal Area Remedial Action/Oil Landfarm facility removal, misc. debris areas	Incidental benefit	Protects maintenance and industrial workers from exposure to waste	Eliminates contact with waste

A Preview... *continued from page 1*

Next, remediation alternatives were developed in the Feasibility Study to implement the cleanup objectives identified in the Baseline Risk Assessment. Ten options were initially developed; half were screened out because they were not technically or administratively feasible. The remaining five alternatives have been presented in the Proposed Plan, including the alternative preferred by DOE: removal of contaminated material in the Boneyard/Burnyard, the primary contributor to risk in BCV, and interception and treatment of shallow groundwater at the S-3 Ponds and Bear Creek Burial Grounds. This alternative is designed to retain the current DOE-controlled industrial area in Zone 3, establish a restricted use area in Zone 2, and establish unrestricted use in Zone 1.

The BCV covers a large area, extending approximately 7 miles from the eastern end of the Oak Ridge Reservation Y-12 Plant to the Clinch River, a distance of approximately 16 km (10 miles). The area of the valley addressed in the Proposed Plan consists of that portion of BCV constituting the BCV watershed. The watershed extends from the western end of the Y-12 Plant to approximately 0.4 km (0.25 mile) west of Hwy. 95, a distance of approximately 11 km (7 miles). The ORREMSSAB anticipates keen public interest in the Proposed Plan. We will continue to communicate with DOE, monitor the status of the Proposed Plan and the scheduled public comment period, and provide additional information as it becomes available. The ORREMSSAB encourages everyone to voice their opinion about this Proposed Plan during the upcoming public comment period.

Learn more about SSAB

ORREMSSAB maintains a home page on the World Wide Web. The Uniform Resource Locator address is:

http://www.ornl.gov/doe_oro/em/ssab

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