

WM'00 Conference, February 27 - March 2, 2000, Tucson, AZ

Next Steps for Stewardship
Results of the DOE Site Specific Advisory Boards' Workshop on Stewardship

L. L. Sigal
Oak Ridge Site Specific Advisory Board (USA)

D. J. Sarno
Phoenix Environmental (USA)

ABSTRACT

In October 1999, over 100 Department of Energy (DOE) stakeholders, including 50 members of DOE Site Specific Advisory Boards (SSABs) from nine DOE sites, met for two days in Oak Ridge, Tennessee, to discuss the current state of stewardship at DOE sites and the actions and activities for stewardship that are most important for DOE to pursue in the near future. The participants developed Ten Next Steps for Stewardship and agreed that DOE, in cooperation with its stakeholders, must provide direction, funding, and technical support for implementation of these actions. The ten steps and their associated issues can be summarized as:

- acceptance of the responsibility for long-term stewardship for contaminated areas;
- development of a national policy on stewardship;
- establishment of a legal mandate for funding stewardship activities separate from remediation funding;
- development of a better understanding of the tradeoffs and relationship between cleanup and stewardship;
- development of guidance for site-specific stewardship plans;
- involvement of stakeholders in stewardship planning, oversight, and review; and
- establishment of information systems (e.g., data bases, permanent markers) designed for use for future generations.

INTRODUCTION

In Oak Ridge, organized public involvement in stewardship issues began with the End Use Working Group, a broad-based stakeholders' group formed in 1997 by the Oak Ridge SSAB. The group was asked by DOE Oak Ridge Operations (herein DOE) to study the contaminated areas on the DOE Oak Ridge Reservation and to make recommendations about future uses of the land(1). During End Use Working Group deliberations, it was apparent that some level of radioactive and chemically hazardous contamination would remain and that a stewardship program would be needed to protect human health and the environment from future risks associated with contamination. Thus, in collaboration with the Stewardship Committee from Friends of Oak Ridge National Laboratory,

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members of the Local Oversight Committee Citizens' Advisory Panel, the City of Oak Ridge Regional Planning Commission, the League of Women Voters, and other stakeholders, an End Use Working Group Stewardship Committee was formed.

The product of the End Use Working Group Stewardship Committee, the *Oak Ridge Reservation Stakeholder Report on Stewardship*(2), was widely distributed and has influenced stewardship planning at local and national levels. The report presents the attributes and basic elements of a long-term stewardship program; describes the existing and proposed statutory provisions for stewardship and institutional controls; and presents recommendations for a Reservation stewardship program, including stewards, physical and institutional controls, information systems, research, and funding options.

One of the goals of the End Use Working Group Stewardship Committee(a) was to “promote interaction concerning stewardship among individuals and appropriate local, state, and federal organizations.” To that end, in February 1999, the Oak Ridge SSAB proposed a workshop of complex-wide DOE SSABs to generate a general understanding of the types of issues and activities encompassed in stewardship for contaminated areas. The proposal was approved by the chairs of the twelve DOE SSABs. The DOE Headquarters Office of Intergovernmental and Public Accountability agreed to support the workshop and thus, planning for the national workshop began in earnest.

Early in the planning stages, conference calls among SSAB chairs revealed a wide range of understanding of stewardship, and of expectations for the outcome of the workshop. Some stakeholders thought that stewardship was not an issue at their sites because hazardous and radioactive wastes would be removed and contaminated areas would be “cleaned-up.” Others thought that attention to stewardship would signal acceptance of site closure. And still others simply had not thought about how the legacy of contamination would affect future generations.

Thus, instead of trying to develop consensus recommendations for submittal to DOE Headquarters, as has been the practice of previous complex-wide SSAB meetings, it was agreed that the goal of the stewardship workshop was enhanced understanding of stewardship and how it might apply to DOE sites.

It was also apparent early on that no single definition of stewardship would work for all sites, but for purposes of the workshop, it was agreed to start with the following general definition developed by the Oak Ridge stakeholders:

Stewardship is defined as the “acceptance of the responsibility and the implementation of activities necessary to maintain long-term protection of human health and of the environment from hazards posed by residual radioactive and chemically hazardous materials.”

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About a month before the workshop, five issue papers were distributed to participants. The papers addressed the following questions:

- What is stewardship?
- What needs to be done?
- Who should do what?
- How should we deal with stewardship information?
- How should stewardship be funded?

Based on the issue papers and a plenary discussion for proposed core topics, attendees at the workshop decided to address the following topics:

- funding;
- stewardship roles and responsibility;
- community involvement;
- linkages (i.e., tradeoffs and relationships between cleanup and stewardship); and
- information and sustainable responsibility.

In site-specific breakout sessions, site representatives decided on site-related issues to bring to the core topic breakout sessions. At least one site representative was assigned to each core topic group. Site-specific and core topic sessions (led by professional facilitators) alternated so that everyone had an understanding of the issues discussed in each of the core topic groups.

The final plenary session was a presentation and discussion of the issues and proposed next steps for stewardship developed by the core topic groups. Consensus on the final next step statements was reached with the understanding that the statements do not represent agreement or endorsement by the SSABs. However, the results of the workshop were to be submitted to DOE Headquarters. There was general agreement that workshop attendees would take the next steps for stewardship to their respective SSABs; federal, state, and local governments; tribes; and other stakeholders. A followup meeting on stewardship was agreed to by representatives from the nine attending SSABs, at which time the boards would work on formal unified stewardship recommendations to be presented to DOE Headquarters.

NEXT STEPS FOR STEWARDSHIP

The following Ten Next Steps for Stewardship and their associated issues are presented exactly as agreed to by the workshop participants in the final plenary session. Perusal of the issues gives the reader insight to the deliberations of the core topic breakout sessions. Although the level of detail provided by each group for the final plenary session varied, it is interesting to note the range of ideas generated and discussed in such a short time. Step one was generated by the funding breakout session; steps two and three by stewardship roles and responsibility; steps four and five by

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community involvement; steps six and seven by linkages; and steps eight, nine, and ten by information and sustainable responsibility.

The preamble to the Ten Next Steps for Stewardship was generated by the community involvement group and was unanimously adopted by the final plenary session. It reads:

DOE, working in cooperation with its stakeholders, needs to provide direction, funding and technical support for the implementation of these Next Steps for Stewardship:

- 1) Establishment of a legal mandate for assured stewardship fund for DOE, DoD(b), FUSRAP(c), or successor agency sites, separate from remediation and spending funds, to include:
 - Determination of how the fund(s) are to be generated
 - Planning for and estimating of ownership costs today
 - Development of a plan for the application of money for sites
 - Assurance of public participation in all of the above
- 2) The development of a national policy on stewardship that includes:
 - Legal basis (law)
 - On-going review
 - Allowance for site-specificity
 - Establishment of minimum standards
 - Continuing research and development
 - Funding
 - Stewardship termination criteria
- 3) The immediate start to developing enforceable site-specific stewardship plans at each DOE site with the involvement of:
 - Tribes
 - Federal government
 - State government
 - Local government
 - Public environmental advocates
 - Public health officials
 - Youth
- 4) The establishment of a national policy for stewardship and the pursuit of legislation mandating the direct involvement of affected stakeholders in site-specific stewardship planning including the development of written site-specific stewardship plans.
- 5) The establishment of site-specific mechanisms for regular stewardship reviews and future broad-based stakeholder involvement and oversight.

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- 6) The development of a better understanding of the tradeoffs and relationships between cleanup and stewardship, for example:
 - Full costs
 - Risks
 - Ecological impacts
 - Environmental quality
 - Political realities

- 7) The development and implementation of stewardship plans that take advantage of the dynamic nature of stewardship, including:
 - New technologies
 - Changing land use
 - Changing risk evaluations
 - Information needs of decision-makers

- 8) The utilization and/or development of both detailed robust information systems and permanent systems containing minimal essential information (e.g., plaques, monuments).

- 9) The utilization and/or development of information systems with the following characteristics:
 - Full characterization of contamination
 - Closure configuration
 - Declassification of relevant information
 - Discrepancies between designs and as-builts
 - Life cycle risk profiles
 - Geohydrological profiles
 - Lessons learned (e.g., Love Canal)
 - Credible futurist scenarios
 - Record categories: RODs(d), waste transfer, etc.
 - Durable and flexible storage media (upgrades)
 - Lessons learned from WIPP(e) and SETI(f)
 - Balance national scope with local needs; quality, relevance, and timeliness
 - Utilize and integrate local institutions (museums, libraries, historical societies, county records)
 - Accessibility
 - Redundancy
 - Diversity of form and content: oral, written, and video histories
 - Ensure periodic review to integrate new information
 - Integrated into the culture
 - Utilize durable institutions (schools, churches, museums, libraries)
 - Utilize varied media for participation: signage, kiosks, recreational activities
 - Develop standardized symbols

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- 10) In order to ensure sustainable responsibility for long-term stewardship for contaminated areas, the following actions should be taken:
- Educate: inform future generations of important history; cultivate long-term stewardship values
 - Formalize long-term stewardship in legally binding agreements to ensure involvement and accountability
 - Recruit: “hand off the baton”
 - Institutionalize: formal local, tribal, state and federal governmental responsibilities

Some common elements can be found in the Ten Next Steps for Stewardship and the associated issues. Of primary importance to most of the workshop participants were stakeholder/public involvement in stewardship for the contaminated areas and development of site-specific stewardship plans. The need to institutionalize stewardship by establishment of a DOE policy and the pursuit of legally binding agreements was mentioned in six of the ten next steps. Funding and information were recognized as vital to the effectiveness of long-term stewardship. And finally, the preamble and the Ten Next Steps for Stewardship make it clear that the federal government (in this case, DOE) must accept the responsibility for long-term stewardship of contaminated areas so that future generations and the environment are protected.

As previously mentioned, the Next Steps for Stewardship were not formally submitted to DOE Headquarters. Nevertheless, Headquarters was well represented at the workshop and there is no doubt that the message was received in Washington.

Although not directly related to the workshop, in the last year tremendous strides toward institutionalizing stewardship have been taken by DOE. These include, for example:

- support for a study to identify and evaluate alternatives for assuring long-term financing and oversight of stewardship activities (August 1999);
- announcement of long-term stewardship as one of five principles for the Environmental Management Program (September 1999);
- publication of *From Cleanup to Stewardship* (October 1999; provides information to support the scoping process required by the 1998 Programmatic Environmental Impact Statement Settlement Study);
- establishment of an Office of Long-Term Stewardship (November 1999); and
- distribution of draft guidance for the National Defense Authorization Act report on DOE long-term stewardship responsibilities (January 2000).

CONCLUSIONS

At this writing, it is too early to judge the success of the SSAB Workshop on Stewardship. Nevertheless, the feedback from attendees (e.g., SSAB members, state regulators, federal and local government participants) was positive.

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It was generally agreed that the workshop:

- contributed to understanding the concept of long-term stewardship and its relationship to remediation of contaminated areas on DOE sites,
- highlighted important long-term stewardship issues,
- provided a springboard for SSAB stewardship initiatives,
- provided substantive input to DOE Headquarters planning for long-term stewardship, and
- provided a solid basis for the next SSAB stewardship meeting.

From the standpoint of the Oak Ridge SSAB and the Stewardship Working Group, the SSAB Workshop met goals established in 1998(2) to “promote public understanding of stewardship” and to “promote interactions concerning stewardship among individuals and governments,” and in 1999(3) to “further a national commitment to environmental stewardship across Department of Energy sites.” It is gratifying that the DOE is accepting the responsibility and implementing activities necessary to maintain long-term protection of human health and the environment from hazards posed by residual radioactive and chemically hazardous materials.

REFERENCES

1. *Final Report of the Oak Ridge Reservation End Use Working Group* (July 1998).
www.oakridge.doe.gov/em/euwg/cover.htm
2. *Oak Ridge Reservation Stakeholder Report on Stewardship* (July 1998).
www.oakridge.doe.gov/em/euwg_stwd
3. *Oak Ridge Reservation Stakeholder Report on Stewardship, Volume II* (December 1999).

FOOTNOTES

(a) Another goal of the End Use Working Group Stewardship Committee was establishment of a stakeholder group to follow up on the committee recommendations to the DOE Oak Ridge Environmental Management Program. To that end, the Stewardship Working Group was formed in February 1999 and supported by DOE. The group met regularly until December 1999, when it published its report(3) on the status of stewardship for the Oak Ridge Reservation. Some of the unresolved issues associated with stewardship are treated more explicitly in this second stakeholder report (e.g., stewardship requirements in Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) documents, CERCLA five year reviews, and the role of the community with regard to oversight of stewardship on the Reservation). In addition, the roles and relationships of the various stewards and the information requirements for stewardship are more fully developed. And, for the previously unresolved issue of funding, recent events are described that may set a precedent for establishment of trust funds for stewardship (i.e., establishment of a trust fund for care of the waste disposal facility in Bear Creek Valley).

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(b)Department of Defense

(c)Formerly Utilized Sites Remedial Action Program

(d)Records of Decision

(e)Waste Isolation Pilot Plant

(f)Search for Extraterrestrial Intelligence