

LESSONS LEARNED FROM THE 1998 SITE SPECIFIC ADVISORY BOARD LOW-LEVEL WASTE SEMINAR

Earle C. Dixon (NV), Wendy G. Lowe (ID), Michael A. Schoener (SC), Doug Sarno (OH), Tonya Covington (NM), Ken Korkia (CO), Max Power (WA), and M.J. Byrne (NM)

ABSTRACT

The Site Specific Advisory Board (SSAB) program for the U.S. Department of Energy (DOE) Environmental Management (EM) program conducted a three-day seminar to discuss defense low-level waste (LLW) disposition options. The LLW Seminar provided an opportunity for SSAB members to consider non-technical barriers faced by the DOE in the decision-making process for LLW disposition and to develop suggestions for overcoming those barriers. A team of eight facilitators developed the objectives and an agenda for the Seminar, and then facilitated the entire meeting attended by 60+ participants and 25+ observers. Because participants were knowledgeable and wanted a minimal amount of overview and summary information on DOE LLW disposition options, the facilitation team designed the agenda to move swiftly into small group discussions. Five discussion groups focused on five categories of the LLW issue constituting: 1) transportation; 2) equity; 3) system-wide changes; 4) economic; and 5) environmental /safety. Each small group developed statements of the three most important barriers/challenges the DOE faces in attempting to complete the decision process for LLW disposition. The small groups also provided suggestions for resolving those barriers. Following a plenary session where all barriers and suggestions were discussed, the SSABs ranked the suggestions according to importance and ability of their full board to support the points in a consensus recommendation letter. Lessons learned from the LLW Seminar include:

1. Frequent communication among the facilitators through weekly conference calls, e-mails, and faxes was vital to help build the agenda and define objectives for the Seminar.
2. Design and emphasis on a single nuclear waste topic provided more time and activities in the Seminar agenda for participants to openly discuss information and communicate ideas.
3. Facilitator process and content expertise primarily from their respective SSAB program resulted in Seminar objectives that were achievable and an agenda that was manageable.
4. Clear communication regarding the Seminar objectives, particularly the exclusion of any activity requiring a consensus position from the participants, encouraged cooperation to support the agenda and achieve the objectives.
5. The Seminar demonstrated the potential for convening large numbers of stakeholders to address a specific topic and develop draft recommendations acceptable to a wide variety of perspectives.

INTRODUCTION

In 1991 the Office of Technology Assessment published Complex Cleanup, a report documenting the need for a decision-making process through which public concerns can be addressed and resolved. This decision-making process would help ensure public acceptance of cleanup-related activities for the DOE Environmental Management (EM) program (1). Advisory boards were suggested as a mechanism to develop meaningful roles for affected community members to contribute in site-specific policy and technical decisions. The Interim Report in 1993 by the Federal Facilities Environmental Restoration Dialogue Committee (Keystone Committee) recommended the creation of SSABs as a means to involve stakeholders more directly in agency cleanup decisions. Based on these early recommendations and guidance from

the 1972 Federal Advisory Committee Act (FACA), the EM SSAB Charter was created and approved in 1994. Though only one FACA-chartered EM SSAB exists, the Department has made a substantial effort to establish SSAB site boards at 12 major facilities across the DOE complex. The SSAB site boards are generally comprised of volunteer citizens from the local community and ex officio representatives from various levels of government impacted by the cleanup and waste management activities at the DOE facility. The SSAB program and other advisory committees and various stakeholder organizations regularly provide input to the DOE decision-making process. The contribution of advisory boards like the SSAB is helping to provide the DOE with community principles, values, and concerns addressing environmental restoration and waste management issues.

In the effort by the DOE to get on with the business of cleanup in an open and efficient manner, the Department has stated the need to make decisions under the Waste Management Programmatic Environmental Impact Statement (WM PEIS, 2). The DOE would like to plan and make strategic decisions over the next few years under the WM PEIS that reflect informed stakeholder input, and that meet regulatory compliance and federal budget constraints. In addition to the WM PEIS, the Department has supported multiple efforts to discuss DOE EM decision strategies with stakeholders because of the interconnected nature of site restoration and closure at as many sites as possible with waste transportation and disposal at as few sites as possible. The DOE and stakeholders have found meetings of an intersite nature to be positive steps toward establishing regular dialogue opportunities in an open forum for presentation and discussion of the latest DOE decision making information and public concerns.

BACKGROUND OF THE SSAB LLW SEMINAR

Prior to the LLW Seminar, members of the SSABs had limited opportunities to meet as a single organization to discuss EM issues except for the Semi-annual SSAB Chairs Meeting hosted by the DOE. Activities like site board meetings, the National Dialogue Pilot Field Workshops, and the Intersite Discussion Workshops have provided recent opportunities for SSAB members to discuss their issues of concern in an intersite manner. Information presented in support of these activities continued to reflect the intention of the DOE to move forward with programmatic decisions for the management of numerous nuclear materials and wastes. Decision-making on DOE LLW disposition was noted to be an important issue for intersite discussion and most DOE sites have had and/or continue to manage LLW. For over two decades LLW has been disposed at DOE facilities as part of the program to design, test, and manufacture nuclear weapons. In order to reduce high end scenario cost estimates for long term restoration and waste management activities, the Department continues to explore programmatic options for consolidating waste disposal at a few major sites under the WM PEIS.

The Nevada Test Site (NTS) has historically disposed of onsite and offsite generated LLW as part of its mission to test nuclear weapons. The NTS waste management facility is reported to have the largest disposal capacity for LLW in the DOE complex (3). Members of the NTS Community Advisory Board (CAB) wanted to have a dialogue with active and potential offsite LLW generators in order to discuss their concerns over LLW stewardship. A white paper drafted by the NTS CAB for a LLW meeting in the spring of 1998 attracted little attention, and the idea

struggled to find support. The reason for a lack of initial attention for a LLW meeting among the SSABs was due to the overwhelming load of existing issues requiring board attention at the site level. The SSABs were also tracking the implementation of the Intersite Discussion Workshops for mid -1998 as an opportunity to express SSAB concerns to the DOE over pending waste management decisions.

DESIGN OF THE SSAB LLW SEMINAR

From the beginning of discussions for a LLW meeting, potential attendees questioned the value of addressing only a single issue like DOE LLW disposition when there were so many important issues facing the SSABs. The NTS CAB Technical Advisor emphasized that the meeting should be designed to address a single waste stream because the LLW issue is complicated and controversial in and by itself. Moreover, previous meeting designs attempted to focus on too many issues in too little time with no real product to show for the effort. The NTS CAB maintained that the SSAB exploration of the LLW issue at a meeting would be timely because of the reported schedule for the WM PEIS Record of Decision (ROD). The LLW ROD was scheduled to be decided and issued during the fall of 1998 or early 1999. Under the LLW ROD, the NTS is anticipated to play a major role in the disposition of DOE LLW as possibly a regional disposal facility for the DOE complex.

The LLW Seminar was initially designed to be a two day event with an optional NTS tour on a third day for members of the attending SSABs. In order for the meeting agenda to provide equal time for introductory presentations about the configuration of LLW at each site, each SSAB presentation would need to be 10-15 minutes long. A 10-15 minute presentation by approximately 10 site boards without time for questions but including breaks would take the better part of a half day. In concert with initial meeting agenda items like the opening remarks, introductions, and program overviews, the better part of the first day of any LLW meeting would be spent setting up for small group discussions primarily on the second day of the meeting. An informal social event for the evening prior to the first day of the meeting was added to the design as an "icebreaker" activity to help build support for the two days of the Seminar .

The initial design of the SSAB LLW Seminar was directed toward the four major objectives:

- 1. To learn about the present configuration of LLW at each of the DOE sites.**
- 2. To learn the status of DOE's efforts to determine the disposition for LLW.**
- 3. To discuss SSAB member concerns about how the disposition process will proceed.**
- 4. To establish communication among the various SSABs to enable continued dialogue.**

The SSABs were encouraged to send no more than 4-5 members to the LLW Seminar selected at the discretion of the respective boards. The initial design was targeted for a maximum of 75 participants based on considerations for meeting room capacity, facilitation, resources, subject matter, and the limited agenda time.

In an effort to pulse SSAB members about categories of the LLW issue and provide early feedback to the facilitation team, the registration form for the Seminar requested participants to

rank eight topics based on importance. The eight topics included: stakeholder concerns, political considerations, economic concerns, equity considerations, regulatory considerations, state/tribal concerns, transportation considerations, and technical concerns. Those SSABs that agreed to participate were requested to provide three contributory items: 1) an informational display on LLW configuration at their site; 2) a presenter to staff their site display during the opening social reception and to provide a presentation to the full group during the site specific summary part of the first day agenda; and 3) a trained neutral facilitator to assist small group exercises. Two SSABs did not utilize a facilitator on a regular basis at their site so they were unable to contribute to the seminar in this manner.

As part of the effort to build support for and incorporate the input of other facilitators and boards into the design of the LLW Seminar, the NTS CAB Technical Advisor hosted a weekly conference call for the team of SSAB facilitators. A biweekly conference call was hosted by the DOE Nevada Operations Office for the SSAB Chairs and interested DOE Headquarters and program managers to discuss the latest developments for the LLW Seminar. This effort helped keep the DOE abreast of the Seminar design and helped build their part of the agenda.

One of the key issues in the discussion of the meeting design on the conference call was the small group breakout sessions. The small group sessions were the primary activity on the agenda where the participants from each site would work together to craft positions on a particular aspect of the LLW issue. Facilitators decided that the initial eight categories of concern was too much to facilitate in the small group sessions. It was decided that the final design would be based on the following five categories: 1) transportation considerations; 2) equity, inter-state, tribal, and environmental justice (herein referred to as equity); 3) system-wide considerations; 4) economic considerations; and 5) environmental & safety considerations.

The facilitators continued to refine the objectives of the meeting by discussing them with their members in one week and reporting the results back to the facilitation team in the conference call the following week. This move forward and report back method in the weeks prior to mid-August helped to revise the initial four objectives into the final six objectives below:

- 1. To establish communication among the various SSABs that will allow continued dialogue.**
- 2. To learn about the complex-wide LLW program and the present configuration of LLW at each of the DOE sites.**
- 3. To learn about the status of DOE's efforts to determine the disposition for LLW.**
- 4. To discuss barrier/challenges to DOE's decision-making process.**
- 5. To formulate suggestions for overcoming barriers/resolving challenges to DOE's decision-making process.**
- 6. To discuss themes among the suggestions that offer opportunities for collective action among participating SSABs.**

EXECUTION OF THE SSAB LLW SEMINAR

On the afternoon of August 16, 1998, the facilitation team and meeting support staff met to go over the agenda one more time. The team and staff ran through the entire agenda and discussed meeting logistics, time management, obstacle negotiation, and agenda assignments and

responsibilities. The facilitation team decided that the lead facilitator role for each section of the agenda would be managed by rotating teams of two facilitators. It was also decided that it would be very beneficial for discussion purposes when the large group reassembled after the small breakout sessions, to have each SSAB perform a simple ranking of the position statements crafted by the small groups. The position statements would be ranked on a scale of importance and supportability for their full board to consider the statement in a consensus recommendation to the DOE. Since the LLW Seminar itself was not designed to result in a set of recommendations representing the SSAB program, the results of a simple ranking by SSAB members in attendance might be helpful to the full boards.

The evening was designed as an opportunity for Seminar attendees to check in, meet each other in an informal setting, and start communicating some of their perspectives on the LLW issue to one another. Displays from each of the sites were on hand to help provide site specific LLW configuration information, and participants were encouraged to visit the displays. This activity was the first time that members of the SSAB program had a chance to meet formally or informally as a group to discuss issues using their own agenda over a two day period.

August 17, 1998 was the first full day of the LLW Seminar. The NTS CAB Chairperson called the meeting to order and gave a welcome to all attendees. The DOE/HQ staff were introduced and the Designated Federal Officer was noted in attendance as required by FACA. Attendees were orientated to the LLW Seminar by providing background information, review of the six meeting objectives, and review of the 11 assumptions used by the facilitators to design the seminar (4). The assumptions were necessary for the facilitators to frame the overall Seminar design to ensure that it could meet the objectives.

The DOE presented an overview of the LLW program which included regulations, policy, the decision-making process for LLW disposition, the options for LLW disposal, and the performance assessment process for evaluation of the LLW program. An overview of LLW transportation issues from a national perspective and the strategy for issue resolution were also presented by the DOE. Seminar attendees worked through lunch, visited the site displays, and continued to share information. After lunch each SSAB (10 total) presented an overview of their respective site's LLW program and their board's concerns related to the program.

At this point the LLW Seminar agenda turned to a facilitated process involving four steps that helped participants develop suggestions to overcome barriers and challenges that the DOE faces in each of the five categories. Step One began on the afternoon of the first day and continued through the following morning of the second day. Steps Two, Three, and Four took place during the afternoon of the second day.

Step One called for participants to be divided into five small groups with at least one or two representatives from each SSAB in the groups. Group participants discussed the three most important barriers and challenges facing the DOE, and they developed suggestions for overcoming or resolving each of those three barriers and challenges.

Step Two had a representative from each of the five small groups report the results in a plenary session. Questions from participants were encouraged to ensure that everyone understood the suggestions and the barriers or challenges they were crafted to address. Four groups developed three suggestions each (12), and one group developed four suggestions with one suggestion worded two ways (5) resulting in a total of 17 suggestions for plenary discussion. A form was created to allow the LLW Seminar participants to rank the entire list of 17 suggestions.

Step Three asked the participants representing each of the ten SSABs to rank the 17 suggestions based on importance and supportability by their full board. It is important to note that the representatives from each SSAB were not empowered to make any consensus position statements on behalf of their full board regarding any of the 17 suggestions. It was also not part of the Seminar design from the beginning to produce a consensus recommendation of any type at the meeting or after the meeting. However, the facilitators agreed it would be advantageous for representatives of the LLW Seminar to have an informal measurement of importance and supportability for the 17 suggestions by site which could be taken back to their full board. The facilitation team speculated that each SSAB would consider a review of the 17 suggestions for possible consideration in a consensus recommendation letter to the DOE before the end of the year.

Each SSAB was asked to provide two scores for each of the 17 suggestions. The first ranking score reflected how important the group thought the suggestion was in order for the DOE to move forward with implementable decisions for LLW disposition. Ranking the suggestion for importance ranged from 1 (for “not important at all”), to 5 (for essential). The second ranking score for each suggestion indicated how supportable each group thought the suggestion would be if their respective SSAB were to consider developing a recommendation to transmit the suggestion to the DOE. Ranking the supportability for each suggestion ranged from 1 (for “snowball’s chance in xxxx”), to 5 (for “a piece of cake”). The ranking forms were tabulated by the facilitators for an average score for each suggestion by SSAB, and the results were presented to the full group of participants.

Step Four had the LLW Seminar participants reconvene for a facilitated discussion of the results of ranking the 17 suggestions for importance and supportability. Facilitators reviewed each suggestion with the group for clarity, importance, and supportability. Participants were prompted to consider whether there were any areas of general agreement among the SSABs. Discussions focused primarily on particular suggestions that were important to some SSABs and not important to other sites. For example, one group suggested the creation of a “Super CAB” (an advisory board containing representatives of all the boards) would enhance the effectiveness of the SSAB program to impact the DOE decision-making process. Alternatively, some participants thought that another advisory board would just add more bureaucracy to the maze of boards and groups already a part of the DOE system.

RESULTS AND LESSONS LEARNED

The SSAB LLW Seminar provided a number of benefits to the DOE SSAB program. First, it demonstrated that representatives of the SSABs could meet and discuss at a knowledgeable level

a single nuclear waste topic such as the disposition of LLW. The LLW Seminar was the first time the SSAB program designed their own agenda and met to discuss a common issue in an intersite fashion. Participation of the SSAB program in previous stakeholder meetings to discuss the various aspects of the nation's nuclear waste problem left many SSAB members feeling their knowledge base was under utilized. Members of the SSAB program have spent years building an advanced knowledge of environmental issues at their home site and other sites within the DOE complex. The SSAB program believes it can make a contribution to help the DOE move forward with decision-making on waste disposition issues because it can provide highly informed input and recommendations.

Secondly, the LLW Seminar provided a format that future SSAB meetings of this type could follow to discuss other important issues under the responsibility of the DOE EM program. Part of the Seminar format is one in which an individual SSAB functions as the host site for the meeting on a particular EM issue because it is of great importance to that particular SSAB site. In this instance Nevada was the host site for the LLW Seminar because the NTS is anticipated to possibly become a regional LLW disposal facility for the DOE complex, and the NTS CAB wanted to dialogue with other sites regarding disposition of their LLW.

One of the most important features of the second benefit is the role that the facilitation team played in helping to design and execute the agenda. Meetings that are organized and productive take planning by those persons who are going to manage and facilitate the meeting. Although not all the SSABs have a facilitator, utilization of these key support persons helped tremendously because of their first hand knowledge of their respective board and their abundance of meeting experience. Also, it was advantageous to have a team of facilitators at the Seminar because they could manage multiple aspects of the meeting simultaneously while keeping on time and task with the agenda.

The third benefit of the LLW Seminar was the list of 17 suggestions to overcome barriers and challenges to the DOE decision-making process for LLW disposition. This list is significant because it was developed by five groups constituting approximately 60+ members of the SSAB program from 10 sites across the DOE complex. The list of 17 suggestions was produced at the Seminar to provide individual boards with a document they could utilize to craft individual letters of recommendation. Some SSABs have followed up with their own recommendations using the results of the LLW Seminar, whereas, others have not. Facilitators of the LLW Seminar knew that it would be extremely difficult to produce a single letter from the SSAB program in the two and a half days of the meeting, so they settled to produce the list of 17 suggestions.

During the September 1998 SSAB Chairs meeting a suggestion was agreed to by the various chairs that it would be worth while to explore the possibility of transmitting a single recommendation letter to DOE with numerous board signatures. The suggestion was based on the premise that a single recommendation with multiple SSAB signatures would have a more powerful impact than separate transmittals with single signatures. An effort by the NTS CAB to lead the development of a single recommendation letter based on the 17 suggestions transmitted over the signatures of multiple SSABs has not been successful to date. Coordination of this

effort has proven to be extremely difficult because of various reasons involving: more important and abundance of issues at the site level; lack of facilitation capacity; scheduling conflicts; and lack of supportability for the original wording of the suggestion(s). Future seminars of this type undertaken by the SSAB program should be mindful of how challenging and difficult it can be to produce at single recommendation letter at or following the meeting.

Generally speaking based on the rankings at the Seminar, most participants agreed that the suggestions related to transportation considerations were ranked higher in both importance and supportability than the suggestions in the other four categories. There was also general agreement that the suggestions related to economic considerations were ranked lower in both importance and supportability. However, after the 17 suggestions were reviewed by the full boards on an individual basis, the facilitators were not able to identify even one suggestion on which there appeared to be agreement across all of the SSABs that participated in the Seminar. If it is believed that follow-on activities to future seminars will similarly attempt joint communication, the design for the meeting should be modified to allow more time to narrow the list of suggestions to a more manageable number in language that could pass the scrutiny of multiple boards.

Other lessons learned from the LLW Seminar included:

- 1. Frequent communication among the facilitators through weekly conference calls, e-mails, and faxes was vital to help build the agenda and define objectives for the Seminar.**
- 2. Design and emphasis on a single nuclear waste topic provided more time and activities in the Seminar agenda for participants to openly discuss information and communicate ideas.**
- 3. Facilitator process and content expertise primarily from their respective SSAB program resulted in Seminar objectives that were achievable and an agenda that was manageable.**
- 4. Clear communication regarding the Seminar objectives, particularly the exclusion of any activity requiring a consensus position from the participants, encouraged cooperation to support the agenda and achieve the objectives.**
- 5. The Seminar demonstrated the potential for convening large numbers of stakeholders to address a specific topic and develop draft recommendations acceptable to a wide variety of perspectives.**

The 1998 LLW Seminar achieved all of the objectives it was designed to address. A final report describing the process and the description of the barriers and challenges DOE faces in decision-making for LLW disposition, along with the 17 suggestions for overcoming the barriers, was produced in a timely fashion. Invaluable discussion of information and interpersonal communication at the Seminar helped give participants and the DOE new perspective and a deeper appreciation for a wider range of topics on a single nuclear waste issue. The LLW Seminar was an important first step in the effort by the SSAB program to work together and exchange information on intersite issues.

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