

# **LESSONS LEARNED FROM PUBLIC OUTREACH MEETINGS**

*Prepared for*

**U.S. Nuclear Regulatory Commission  
Contact NRC-02-07-006**

*Prepared by*

**Miriam Juckett**

**Center for Nuclear Waste Regulatory Analyses  
San Antonio, Texas**

**September 2011**

## ACKNOWLEDGMENTS

This report was prepared to document work performed by the Center for Nuclear Waste Regulatory Analyses (CNWRA®) for the U.S. Nuclear Regulatory Commission (USNRC) under Contract No. NRC-02-007-006. The studies and analyses reported here were performed on behalf of the USNRC Office of Nuclear Material Safety and Safeguards, Division of High-Level Waste Repository Safety. The report is an independent product of CNWRA and does not necessarily reflect the views or regulatory position of USNRC.

The author thanks E. Percy for technical review and J. Winterle for programmatic review. The authors also thank A. Ramos for support in report preparation and L. Mulverhill for editorial review.

## QUALITY OF DATA, ANALYSES, AND CODE DEVELOPMENT

**DATA:** All CNWRA-generated original data contained in this report meet the quality assurance requirements described in the Geosciences and Engineering Division Quality Assurance Manual. Sources for other data should be consulted for determining the level of quality for those data.

**ANALYSES AND CODES:** No scientific or engineering software was used in the analyses contained in this report.

## LESSONS LEARNED FROM PUBLIC OUTREACH MEETINGS

Public meetings have been one of the most important methods of communication in the U.S. Nuclear Regulatory Commission (NRC) high-level waste repository safety public outreach program concerning the proposed Yucca Mountain repository. NRC staff held public meetings to educate and inform the public, as well as to gather important feedback and input for NRC decisionmaking. Over the course of the program, the structure and format of the public meetings evolved as more experience was gained. Staff learned many important lessons throughout the development of the program, and these lessons contributed to continual improvement and overall success.

When the outreach program began, the agency had recently begun enhanced public rulemaking, including more in-depth stakeholder interactions, specifically about controversial rulemakings. These rulemakings were expected to receive many public comments, and it became necessary to collect comments in a different way than the typical format of written submissions. The intent was to assure the public that concerns were being heard by taking transcripts of public meetings and giving the comments made during those interactions the same attention as written comments. This approach allowed the agency to reach a broader audience and solicit input from groups that might not otherwise be aware of the rulemakings or feel comfortable providing written remarks.

The first NRC public meeting pertaining to Yucca Mountain issues was held in March 1999. At that time, a proposed 10 CFR Part 63 had been published for comment. Some staff felt that stakeholders were put off, perceiving that the proposal seemed fully formed and that it was likely that no additional input would be included. Although the meeting was held to explain, gather additional input, and hear concerns about the proposed rulemaking, no plain language summaries or materials were made available to explain the process or contents of the rule. Several NRC staff members were present, including Janet Kotra and Tim McCartin, who had assisted in drafting the 10 CFR Part 63 proposed rule. A discussion panel also included U.S. Department of Energy (DOE) staff, advocacy group members, and representatives of Nye and Clark Counties. NRC and DOE staff gave presentations, and then the panelists led a question-answer session. Two meetings were held: the first at University of Nevada Las Vegas in Las Vegas, Nevada, and the second at the community center in Beatty, Nevada. The presentations were the same for each meeting, but the audience was different in each community.

At these meetings, NRC staff faced negative feelings from many audience members as a result of prior experiences as “downwinders” with U.S. Department of Defense (DOD) actions. NRC had not yet established credibility with the stakeholders, and staff were viewed with skepticism due to a lack of demonstrated independence from other government agencies from Washington, DC, that the communities clearly did not trust. Many questions posed were unanticipated and centered around transportation, DOE and DOD actions, and the ways criteria were being applied differently at the Waste Isolation Pilot Plant versus Yucca Mountain. Many of the questions were not in NRC’s purview. Staff felt that the answers they could provide were not convincing and that they were less than effective and not adequately prepared. The questions in Beatty, Nevada, were even more difficult: they included a wider range of topic areas, and NRC preparation had focused narrowly on the proposed rule. Staff felt that the lack of preparation was more obvious in that venue. Questions addressed to NRC staff included why Yucca Mountain had been designated as the site of study, how NRC was distinct from DOE, and how NRC would deal with previous “messes” created by government entities. Citizens who had viewed pilots from Nellis Air Force Base flying stunts raised emergency planning as a topic

of importance. Previously, DOE had had a lack of attendance at its meetings, but audience members had driven hundreds of miles to attend the NRC meeting and ask these questions. Preparation for difficult and off-topic questions at these meetings had not been given priority, but based on the experiences of these meetings, preparation strategy and priorities changed.

NRC staff began gathering information on how to improve their public interactions. Based on information gained at a seminar on risk communication, staff began message mapping, anticipating follow-up questions that might be asked during the meetings, and preparing answers. For the 10 CFR Part 63 proposed rule, the public comment period was extended in response to public comments. The next meetings were held in June 1999 in Las Vegas, Amargosa Valley, and Caliente, Nevada. In preparation for these meetings, NRC staff worked through the NRC training center with Beverly Silverberg. The topical areas covered were broadened, and an introduction was included in the presentations giving information on the role and responsibilities of NRC and explaining how NRC's public comment period works. The speaker base was broadened to include expertise on transportation and biological effects. For the first time in the outreach program, preparation included dry runs with videotaping and plain language edits to viewgraphs. The preparation helped team members feel comfortable, supported, and more self-aware. The increased success of these three meetings proved the effectiveness of advance preparation. This set a positive precedent for future meetings.

The meeting in Caliente provided a unique opportunity for NRC to garner trust with the public. Some community members came to the meeting to protest, but attempts were made to discourage distribution of protest literature and opposition signage. The NRC branch chief, Bill Reamer, stepped in and enabled the protestors to attend the meeting and have their literature displayed, but on a separate table. The citizens expressed concern about why they felt they couldn't trust the government and were afraid of being lied to. The welcoming of opponents at the meeting helped attendees feel less defensive and feel that NRC listened fairly to all parties in attendance.

Additional lessons learned from these meetings included how to make members of the public feel welcome in the meetings and not be defensive. Furthermore, interactions with stakeholders at these and previous meetings had indicated a significant need for more background on program history. Because some staff members were tasked with many activities (logistics coordination, interactions with stakeholders, preparation of materials, and speaking at the meeting), another important lesson learned was to include enough staff members so staff would not be overtasked. Spreading the team too thinly caused undue stress on the staff members and hindered proper preparation. Finally, another lesson learned was the importance of breaking down the hierarchy inherent in organizations to include every team member's input. Valuable contributions were gained from all staff members on the team, regardless of their position level in the agency, and each team member was encouraged to contribute freely. Team members without technical backgrounds often tend to understand technical matters in a manner more akin to members of the lay public. Consequently, they may provide useful input for improving the language used in outreach materials.

One challenge in preparation was communication between internal offices at NRC. There was concern that press releases or positions taken by one branch might conflict with those of another branch or otherwise cause public concern. The issue of waste being shipped through downtown Las Vegas, Nevada, was one such conflict, which occurred when a bounding analysis in an impact evaluation was released in a document published by another office. Without a context for those scenarios, stakeholders became very concerned and public outreach staff were not aware that the issue had arisen. Significant coordination was

required to ensure that whenever possible, the public outreach team knew what messages from other NRC offices were being released in case questions about those positions or documents arise at public meetings.

In November 1999, a new format was introduced for public meetings. A roundtable discussion was held to discuss Yucca Mountain technical issues, such as whether subsystem criteria or a more risk-informed approach should be used. Staff wanted a public discussion with representatives holding differing points of view to discuss why performance-based standards were so significant to the decisionmaking, and whether that approach lessened stringency of standards and was therefore less protective. At this meeting, major interests were represented at the table, including advocacy groups, DOE, and NRC. Presentations were interspersed with opportunities for questions from the audience, and the table discussion was broken into discrete topics to help the audience follow the conversation. This effort to change the format was based on previous experiences, as segments of shorter length allowed people to ask questions in a more timely fashion. The intention was to create a dialogue, having a conversation with the audience rather than lecturing. This approach received an overall positive response. Comments from the audience that were off topic were easier to incorporate if they were shared more often throughout the discussions. While the comment period was over by the time this meeting was held, NRC staff included as much of the input received as possible into the final development of 10 CFR Part 63.

In May 2000, the staff planned to hold public meetings based on feedback received from the 1999 Beatty, Nevada, meeting that the hearing process was not well understood. Planning and preparation for the meetings proceeded on schedule until 3 weeks before the meetings, it was decided that public meetings could not be held about the NRC hearing process. With very little notice, the staff then had to change the content of the meeting to cover the licensing process to make it more general, and another speaker was brought in to talk about the inspection process that would be applied to Yucca Mountain if it received a construction authorization. This public meeting was also held in two parts: a daytime meeting in Las Vegas, Nevada, for “professional” stakeholders who worked in related fields, and an evening meeting in Pahrump for a broader lay audience. Presentation topics included the NRC role and responsibilities, the licensing support network (LSN), the process of an acceptance review, the docketing procedure, and what would happen when the license application was filed. The turnout for the meeting was good: it included national nongovernmental organizations as well as local organizations, and interactions with the groups were constructive.

Despite the success and good reception of the meetings, many new challenges arose. For one, a last-minute change of venue was required to ensure enough space for participants. This situation underscored the importance of visiting the venues ahead of time to ensure proper facility size and accommodations. Also, a decision had been made not to have public outreach meetings discussing the NRC hearing process because of the possibility that the process would change, but the public viewed making the hearing process less formal as a potential “fast track to Yucca.” The audience still wanted to have a later meeting concerning the hearing process. Additionally, because the meetings were not limited to a specific length of time, staff found themselves pressed for time and exhausted by holding two lengthy meetings in one day. Staff struggled to balance being responsive and answering all the questions with respecting attendees’ time. NRC attorneys also faced the new challenge of defining the line between answering legitimate questions about NRC’s licensing process and what could be perceived as offering legal advice. This challenge persisted throughout the program. Lastly, NRC staff received comments by one meeting attendee that could be taken as threatening, and security at

the meetings became a larger focus. After this meeting, staff coordinated in advance with security staff for all public outreach meetings.

In 2001, NRC staff finally held public outreach meetings with information about the hearing process. These meetings provided another step in the learning process about meeting preparation. During the dry run for these meetings (now standard practice), tensions arose between the technical staff and Office of the General Counsel staff about the content as well as the understandability of the presentations to the lay public. This tension was based, in part, on fundamentally different views of the public and stakeholders held by the attorneys and the staff members. Staff struggled to reach agreement about the acceptability of presenting general information about NRC's adjudicatory process, as opposed to providing legal advice. Staff members from the two offices also disagreed extensively over how best to edit presentations for plain language. Because the dry run was not perceived as successful, another dress rehearsal was needed, and this subsequently became common practice. In the end, the final meetings went well and were well received. County representatives felt that they received needed answers to give to their constituents.

Staff gained important experience about how the makeup of a community can affect the course and reception of a public outreach meeting during the Mesquite, Nevada, meeting in 2001. At a previous meeting, NRC staff had received a request to visit Mesquite, Nevada. Many meeting attendees were retired military or had traveled from across the Arizona and Utah borders. The meeting, held at the local community center, had a different atmosphere than many previous meetings because of the makeup of the population. Most of the citizens were very patriotic, pro-Nevada Test Site, and pro-government, and they were suspicious about environmental groups or advocacy groups. The attendees had many questions about safety and the roles of DOE versus NRC and had a different approach to the situation than those attendees at other Clark County meetings held in Las Vegas. The group showed some skepticism, but was openminded and eager to hear about NRC's role and responsibilities. The atmosphere provided the opportunity to explain the processes as well as convey a message of openness. Because the previous stakeholder interactions were not representative of the viewpoints of those encountered in Mesquite, this experience was valuable in showing the importance of reaching out to communities besides those immediately surrounding Las Vegas, Nevada, and being prepared for a response to meetings based on differing stakeholder composition. The NRC staff made more concerted efforts to reach out to or visit as many affected units of local government (AULG) as possible.

During April 2002, NRC staff visited several communities in Nevada to present an overview of activities related to the proposed repository. The trip served as an opportunity to demonstrate a visible "passing of the baton" from Bill Reamer to Janet Schlueter, the incoming branch chief for the High-Level Waste Division, and preserve a sense of continuity to the public. As part of building long-term relationships with the communities, the staff felt it was important to have a familiar format and familiar faces. The meeting held in Tonopah, Nevada, provided another unique perspective for NRC staff, as Tonopah had been home for the development of the stealth bomber, and citizens were very proud of this achievement and very patriotic. While there was still some "anti-Yucca" sentiment, the community was interested in potential economic benefits of having rail lines to support Yucca Mountain. Citizens expressed suspicion that the Las Vegas, Nevada, community would stonewall the project, or use political clout and take the economic and labor force benefits if the project did go through, and therefore appreciated the attention NRC had given to Tonopah residents. Many citizens in different parts of the state, whose issues primarily focused on transportation, wanted to have input into the environmental impact statement (EIS). The NRC staff needed to be able to explain the NRC process, with the

evolving understanding that most public concerns had to do with the National Environmental Policy Act and the EIS. An important lesson learned was how to anticipate concerns of the community and explain how individuals and affected communities could put their concerns forward to the appropriate regulatory bodies.

In Ely, Nevada, NRC staff had an opportunity to address the town council. This opportunity was important because Ely had specifically requested that NRC visit, which is generally a good indicator that communication with NRC staff is viewed as positive and useful. Eureka County, Nevada, representatives also drove to Ely to talk with NRC staff. Eureka County, Nevada, was primarily interested in pragmatic issues such as timing of input, how to participate in the hearing process, how to learn about the process of submitting contentions, and becoming a party to NRC's hearing process. Prompted by these inquiries, NRC staff developed material to explain these points for later workshops.

Two important lessons came from the Yucca Mountain Review Plan (YMRP) public meetings. First, at one of the meetings a local politician attended the meeting with his own television reporter and used the meeting as a venue for grandstanding. His comments off camera to the NRC staff were very complimentary, but on camera he took a much harsher stance. The staff were courteous and answered his questions, but learned to prepare for politicians who may use the meetings as personal campaigning venues and to plan for dealing with the situation accordingly to keep discussions on topic. Secondly, at another YMRP public meeting, NRC staff answered questions from a reporter, who subsequently printed only part of the discussion. The printed story prompted questions from a Commissioner, who called on the NRC staff member to explain the situation and the answer that had been given. Having a transcript clearly demonstrated that staff had given an acceptable answer to the question. Transcripts could be used not only for sharing information about the meeting with members of the public who could not attend, but also for internal review and demonstration of adherence to agency policies.

Effective advertising and notification of public meetings were other important lessons learned throughout this process. Small newspapers and circulars were used to advertise the meetings, and the NRC onsite representatives were able to find local publications or other news distribution points. While larger ads sometimes drew inflammatory attention from outside activist groups, local ads posted on community bulletin boards or local news sites effectively reached people in advance of meetings. Federal register notices and appropriate press releases were also issued according to NRC practice.

Obtaining an appropriate facility proved key to all of the public meetings. Not only was facility size an important factor, but also the technical capabilities in the room, such as screen size for presentation slides, sound systems, and transcription equipment. Comfortable and adequate seating was crucial, but having space for side conversations, poster display areas, and snack areas also enhanced the overall atmosphere and hence the effectiveness of the meetings.

Furthermore, having the right staff on hand for meetings was extremely important. Not only were public outreach staff necessary for meetings, well-prepared technical experts ready to answer technical questions and legal staff to assist with legal matters were also needed. A variety of expertise on the team from both NRC and the Center for Nuclear Waste Regulatory Analyses contributed to overall success, as members of the team were drawn from not only the high-level waste branch, but also from transportation, environmental, and fuel cycle staff. Discussions were kept on track and fruitful by having an expert facilitator, who also assisted in forming a prioritized agenda and contacting appropriate parties to participate in discussions.

An additional general lesson learned was the significance that stakeholders place on evidence that their concerns are heard. After citizens in Beatty, Nevada, commented about emergency planning concerns, NRC staff made efforts to incorporate those concerns into subsequent presentations on how emergency preparedness plans were written and interpreted. Staff also received positive feedback from occasions when NRC speakers were able to remember and repeat input received during previous meetings, including personal concerns from individual attendees. Not surprisingly, it was important to the stakeholders to not only feel that NRC staff listened attentively, but also were willing to act on the issues that were presented.

While these first meetings laid the foundation for the public outreach work, throughout the duration of the program, several additional public outreach meetings were held that built on the success and lessons learned from previous meetings. Topics included further explanation of the NRC roles and responsibilities, the licensing process, regulation of transportation of nuclear waste, and the YMRP. The format typically included brief presentations by NRC staff (10–15 minutes) and subject matter experts interspersed with question-answer sessions with the audiences and roundtable discussions. Venues for the public outreach meetings varied depending on the nature of the meeting, but outreach staff continued to make every effort possible to hold meetings in the directly affected communities. Community centers continued to be commonly used. For meetings or workshops that included many different communities, Las Vegas, Nevada, often served as a central and easy to travel to location. Once in place, the NRC hearing facility at Las Vegas, Nevada, was used several times. Public meetings were consistently well received and attended by representatives of a wide variety of interests. Feedback from the meetings continued to be positive.

Aside from the public meetings, the public outreach team held stakeholder workshops and meetings for Native American tribes. The tribal workshops started because very few representatives from Native American tribes attended the public meetings. In an effort to better serve that community, mailing lists of tribal contacts were obtained from other agencies and used for notification of a variety of agency actions. Tribal participants offered perspectives on sovereignty and history regarding Yucca Mountain and views on the NRC regulatory framework, and NRC provided information on the NRC role, issues surrounding 10 CFR Part 63, and transportation. Overarching discussions included factors that affected tribal government understanding and evaluation of documents on high-level radioactive waste disposal and transportation, and whether there were unique Native American cultural perspectives on science and the natural world that might affect NRC approaches to providing information to or obtaining information from tribal governments. Considering the sensitive nature of past relationships between tribal governments and the U.S. government, NRC staff felt that it was particularly important to actively seek out and demonstrate attentiveness to Native American concerns.

Three workshops were also held for AULGs, including tribal governments. Participants at the workshops included representatives from most city and county governments surrounding the Yucca Mountain area, as well as citizen groups. NRC staff members spoke about several subjects pertinent to the AULGs, including NRC's licensing process, the formal hearing process, criteria governing adoption of a final environmental impact statement for the proposed repository at Yucca Mountain, transport of spent nuclear fuel, and the role and use of the LSN. Opportunities were given for question-answer sessions with members of the public as well. Particular focus was placed on how AULGs could participate in the hearing and contention processes. These meetings were well attended and well received, with the original meeting followed by two requested subsequent meetings. NRC staff learned that Native American tribal governments were different than other stakeholder groups and expected to be treated as sovereign nations rather than "just members of the public." Although the tribal requests could



not always be fully satisfied, staff strove to treat the spirit behind these requests with dignity. These tribal interactions occurred primarily before NRC had many of its current tribal communications support resources in place, and members of the public outreach team were able to contribute to these internal improvements.

The NRC high-level waste repository safety public outreach team also benefitted from stakeholder interactions in international circles. In August 2000, the Forum on Stakeholder Confidence, or FSC, was established when the Radioactive Waste Management Committee (RWMC) of the Nuclear Energy Agency decided that it needed to form a group to take a disciplined look at societal factors affecting the management of radioactive waste management facilities. RWMC had noted the lack of public acceptance that had plagued earlier programs in Canada, the United Kingdom, and Sweden, and the considerable opposition that arose when new sites were considered for characterization. Another common problem that FSC was expected to confront was the inability of technical and policy experts to understand or be understood when they spoke to concerned members of the lay public. Another promising focus for the new forum was the increasingly visible role of the regulator in building public confidence. At the initial forum meeting, Janet Kotra gave a talk on the efforts being made to improve the NRC meeting format, the goals for future meetings, how NRC explained its agency role, and NRC's efforts at creating a dialogue with the stakeholders.

The FSC structure includes technical meetings as well as site and stakeholder visits, with emphasis not on technical matters but on interactions with the local communities. All of these venues provided an opportunity to interact with other agencies and discover both unique and common problems among stakeholder groups. Issues of safety and confidence do not always have the same definitions based on the sensitivity of the stakeholders, and working groups could solve problems together with a variety of experience bases. The forum follows changes in the international radioactive waste management community and allows sharing of experiences and growing together. However, participating countries had to be careful not to appear to send an unofficial national endorsement of a country's preferred course, or send a particular message to the public or stakeholders. Literature from the forum has been useful in helping NRC understand other outreach programs and results. Also, participation in this forum has informed NRC actions in the public outreach realm and was needed for information and validation. Participation also opened up other opportunities because of personal connections, international visibility for NRC, and increased awareness of other international activities.

The insights gained from the public outreach meetings and stakeholder interactions benefitted not only the stakeholder communities and the NRC high-level waste repository safety program, but also other parts of the agency. Other groups around the agency noticed the success of the high-level waste repository safety outreach program and requested public outreach team input and materials. In 2003, the agency began to recognize the need to increase stakeholder confidence in NRC. Members of the public outreach team were invited to join the Commission's task force to evaluate public communications and to provide strategies for enhancing communications at all levels of the agency. The outreach staff provided useful insights to the team based on experience gained in public outreach meetings and international interactions.

Overall, the NRC high-level waste repository safety program interactions with stakeholders, especially through public meetings, improved greatly over the course of the program, and were seen as beneficial and positive by both the agency and stakeholder communities. The meetings conveyed information to the public and gathered important input for decisionmaking. Through effective preparation, carefully considered presentations, and meaningful discussions, NRC was able to build trust, confidence, and long-term relationships. Lessons learned in this program can

benefit future public outreach programs and ensure continued success with stakeholder interactions.