

ADAPTING UMTRA PROJECT GROUNDWATER PEIS SCOPING PROCESS TO DIVERSE COMMUNITY POLITICAL ENVIRONMENTS

Charles A. Hundertmark, APR,
Jacobs Engineering Group Inc.
UMTRA Project

5301 Central Avenue, N.E., Suite 1400
Albuquerque, NM 87108

Rebecca de Neri Zagal and Melanie Majors
Roy F. Weston, Inc.
UMTRA Project

5301 Central Avenue, N.E., Suite 1400
Albuquerque, NM 87108

ABSTRACT

In 1992 the U.S. Department of Energy's (DOE's) groundwater phase of the Uranium Mill Tailings Remedial Action (UMTRA) Project was initiated with the first 2 of 13 scoping sessions to solicit public input for a programmatic environmental impact statement (PEIS). To address the diverse cultural and socioeconomic aspects of the Project's 22 host communities, an interactive scoping process was developed that allows adaptation to the needs of individual communities. The scoping process drew upon the project's communication training program and on risk communication research to build a responsive scoping format to gain public trust. Informal public comments and formal meeting evaluations indicated high public acceptance of the process. More importantly, during the scoping process a broad spectrum of the interested public contributed pertinent comments at Falls City, Texas, and Durango, Colorado. Future scoping meetings will be conducted by adopting the same model, providing the public an opportunity to learn about the UMTRA Project, discuss issues with technical specialists, and comment on the scope of the PEIS.

INTRODUCTION

Under the Uranium Mill Tailings Remedial Action (UMTRA) Project, the U.S. Department of Energy (DOE) is remediating surface contamination at 24 inactive uranium processing sites in 10 states. During 1992 the Project initiated a programmatic environmental impact statement (PEIS) in compliance with the National Environmental Policy Act (NEPA). The PEIS will determine the approach the UMTRA Project Office will use to address groundwater contamination related to milling operations at the UMTRA sites. The scoping process for the PEIS is a vehicle to inform the public about the groundwater phase of the Project and to involve the public in the decision-making process.

UMTRA Project site communities are diverse in size, ethnic and socioeconomic composition, and the level of public interest in Project activities. Five of the sites (including three at which surface remedial action is complete) are located on or near North American Indian tribal lands. The UMTRA Project Office is committed to a scoping process that meets the letter and the spirit of NEPA. Scoping meetings have been structured to be responsive to public concerns and local cultural and political environments. Consistent with the new guidance from the DOE Office of Environmental Restoration and Waste Management for more effective public participation, the UMTRA Project Office is customizing the scoping process to each community, to address special issues, preferences, and situations.

The scoping process was initiated with pilot meetings in Falls City, Texas, and Durango, Colorado, during November and December 1992. The remaining scoping meetings (11) will be held during the first 4 months of 1993. Oral comments and written evaluations from the public support the Project Office assessment that scoping procedures were well received and effective. Success of the process is attributed to respon-

sive, interactive procedures. The interactive process was a result of the following elements:

- Lessons learned and guidance emerging from workshops sponsored by the Office of Policy and Program Information.
- Teamwork between technical staff and communication staff.
- Application of risk communication principles that have emerged from research.
- Spokesperson coaching based on foundations established through the UMTRA Project communication training program. (1)
- Project management commitment to an effective public participation process.

DETERMINING THE SCOPING PROCESS

Public scoping for the PEIS was initiated in the fall of 1992 with the announcement of 13 scheduled scoping meetings at different locations across the country. (Planning for scoping was actually initiated in 1991, recognizing that preparation would have to be made concurrently with the busiest year in Project history for surface activity.) (2) Public scoping was originally conceived as a formal process. Scoping sessions in a hearing-type format were to be scheduled in each community. Based on the realization that one-way communication (the DOE receiving public comments, but not responding to questions) would very likely limit public understanding and involvement and might generate public distrust, a three-part scoping process emerged from the planning effort. Each part of the process was intended to obtain constructive contributions to the PEIS scoping process in both programmatic and local environments. The process included the following:

- Community assessment--An initial visit to introduce the groundwater phase of the Project to local leaders and solicit their input for the conduct of larger public meetings.
- Orientation meeting--An introduction to the PEIS and the groundwater phase of the Project presented to a larger group of citizens that would be divided into smaller group sessions. Informational fact sheets were distributed at this time.
- PEIS scoping meeting--Conducted in a public hearing format with an independent hearing officer and court reporter recording formal testimony from the public.

Internally, the decision to eliminate a formal hearing format raised concerns that control would be lost. While this objection is to be expected within organizations, particularly Government agencies, (3) the PEIS working group charged with conducting NEPA public participation believed that sharing control with the public does not mean losing control. The latter view prevailed.

The three-part scoping process was followed for the Falls City, Texas, site. Results at Falls City revealed that it was neither necessary nor desirable to separate the informative dialogue from the comment recording session. In Durango, Colorado, the scoping process was consolidated into the following parts:

- An initial community assessment visit and dissemination of fact sheets.
- A public scoping meeting that used small group discussions and a plenary session, both of which were designed to provide information and obtain comments on the PEIS.

The modification of the scoping meeting format at Durango allowed for a comparison between the two scoping processes to evaluate the most effective methods to optimize public input, satisfaction, and responsiveness while providing an efficient, timely, and cost-effective process.

The scoping sessions held in Falls City, Texas, and Durango, Colorado, had a combined attendance of 71 people in addition to DOE and contractor personnel. The scoping process in Falls City was divided into three meetings: an evening information meeting to orient residents to the Groundwater Project followed by an afternoon and evening of formal comment sessions a few weeks later. The information meeting at Falls City attracted 20 residents. The two comment sessions, one in the afternoon, the other at night, attracted a total of 21 residents. At Durango, two scoping meetings were held, one during the afternoon, the other in the evening. Twenty-six residents attended the afternoon session and only four residents attended the evening session.

COMMUNITY DESCRIPTION AND PARTICIPANT RESPONSES

While more than 1600 kilometers (km) [1000 miles (mi)] separate the communities, both share some similar socioeconomic characteristics. Both Falls City, Texas, and Durango, Colorado, depend on agriculture for a good portion of their gross income. These communities have seen the boom and bust cycle of extractive industries and are looking at economic development to broaden their economic bases.

The differences are more subtle. In Falls City, the community consists of a tightly knit group of ranchers who are lifelong residents of the area. Many live on family ranches and supplement their income with other jobs. In Durango, the population is more fluid due to the developed tourist industry and a small private college.

Groundwater information in the form of fact sheets, briefing kits, and news releases were issued in each community prior to the scoping process. Consequently, citizens had an opportunity to review basic information about the Project before the meeting and prepare with questions.

THE FALLS CITY EXPERIENCE

Falls City, Texas, is a predominantly Polish-American community of approximately 560 people. Farming and ranching are the principle economic activities. Historically, the area experienced substantial uranium mining activity. The DOE is responsible for cleaning up the inactive Susquehanna-Western mill, one of three major mill sites in the area. Surface remedial action at the site began in 1992 and will continue into 1994 or 1995. The community has taken an active interest in planning for remedial action. The news media in San Antonio, Texas, approximately 72 km (45 mi) northwest of Falls City, has followed the progress of remedial action planning. Coverage was initially sensationalized, but more recently has become more balanced.

Groundwater is a particularly sensitive issue in the community, with at least one advocacy group viewing the DOE site as a model for private sector cleanup. In September 1992 community assessment meetings were held with key state legislators and agency representatives in Austin, Texas; congressional delegation staff in Austin and San Antonio; advocacy group and community leaders in Austin and Falls City, and members of the citizens' advisory group in the community. Meetings were held with individuals or in small groups. Information was presented on the groundwater phase and on the planned scoping procedure. Feedback was particularly sought on the planned scoping process.

Both community leaders and citizens on the advisory group were familiar with the small group format, which was proposed as an element of the orientation meeting. The state of Texas had recently conducted a public meeting on the issue of correctional institute siting in the county using a similar format, and the format was well received. The Falls City mayor observed that previous formal hearing-type meetings had allowed a few vocal opponents to dominate communication on the correctional facility siting. The small group format allowed all citizens a chance to participate on more even footing. Based on this feedback from the community, the PEIS Working Group (a cross-discipline team responsible for planning scoping activities) reaffirmed the commitment to small group roundtable sessions.

Discussions with citizens and community leaders also confirmed the Working Group's concern that people would not readily separate surface remedial action and groundwater issues. Rather, they wanted to discuss surface remedial action issues as well as groundwater issues. Based on confirmation of this premise, the Working Group decided to include site managers who could respond to surface issues at the scoping meetings.

On November 19, 1992 an orientation meeting was conducted at Falls City. The orientation meeting was conducted to provide information to the public so that they would have

an opportunity to learn about the groundwater issues and ask questions before commenting in the scoping meeting. The orientation meeting started with a presentation by the DOE representatives providing an overview of the groundwater phase of the Project. Introductory presentations were followed by roundtable discussions led by technical specialists from the Project. Attendees at this and subsequent meetings were asked to fill out simple evaluation forms rating elements of the meeting structure. (See Table I of Appendix A and Table I of Appendix B.)

Two scoping sessions to allow the public to speak for the record were held in Falls City on December 8, 1992. A brief introduction to the Project was presented followed by an invitation to members of the public to address the audience. Only two members of the public participated. Following the opportunity to make formal comments for the record, members of the public were invited to roundtable sessions to discuss any additional issues. Participation in the roundtable sessions was more animated than participation in the formal comment session. Comments captured on flip pads during roundtable sessions proved to be a valuable source of pertinent comments on the scope of the groundwater PEIS.

THE DURANGO EXPERIENCE

As at Falls City, ranching is also a mainstay in Durango; but the community has a small private college with highly focused environmental groups. The area is a tourist destination, and becoming a premier ski area in the west. The current population is approximately 12,500.

Based on the Falls City experience, it was determined that scoping sessions would be more effective for both the public and the DOE if the orientation and comment recording sessions were combined. The consolidated meeting format was presented to community leaders and citizens during a community assessment trip and was favorably received.

At the Durango site, surface work is complete, and the UMTRA Project is not currently the focus of community interest. The scoping session was held immediately following a Bureau of Reclamation (BOR) meeting attended by more than 200 citizens. The BOR is proposing a controversial surface water project that closely borders the former UMTRA mill tailings site. The PEIS working group was particularly concerned about the meeting in Durango because of public outrage expressed at the BOR meeting. To address the concern, the Working Group made a strong effort to ensure that representatives of advocacy groups that opposed the BOR's Animas-La Plata project were contacted during the community assessment. While advocates recognize a relationship between the two projects, the response from those attending the Durango UMTRA Project scoping sessions was positive.

Based on positive feedback from citizens, community leaders, and advocacy group representatives during the community assessment, the UMTRA Project Office proceeded with a consolidated scoping meeting format that included an informative presentation by the DOE, roundtable groups that allowed a discussion between technical specialists and members of the public, and an opportunity for formal comment by the public. Public comment was recorded on flip pads from the roundtable groups and from the formal comment session by a court recorder. The majority of the public preferred to ask questions and make comments during the small group sessions. Both oral and written evaluations by participating members of the public affirmed the effectiveness of the pro-

cess. The process and perceived responsiveness of the DOE were contrasted favorably with the recent BOR process.

ASSESSMENT AND LESSONS LEARNED

After a self-assessment of these two scoping experiences, the PEIS Working Group decided on a blueprint for a meeting format that would achieve DOE's scoping commitments while allowing the flexibility necessary for modification for each community. This scoping format consists of a presentation of the groundwater phase of the Project and an explanation of the PEIS and how the public can participate. This is followed by small group discussions led by technical specialists from the Project. They focus on programmatic and site-specific issues concerning hydrogeology, human health and the environment, and the PEIS process. In addition, a discussion group involving the DOE and state/tribal representatives is available to address topics other than the groundwater PEIS: such as surface remediation, state/tribal activities, and local environmental projects of concern. Comments and questions raised during discussions are recorded on flip pads. When the audience reconvenes in a plenary session, these comments and questions are discussed further and then read into the scoping record. Finally, time is also allotted for people wishing to address their comments to the entire audience. Written comments may be submitted at the scoping sessions or may be mailed to the Project Office. Scoping sessions are held either in the afternoon or in the evening unless the community prefers both times.

The PEIS working group applied the lessons learned from these initial sessions to community assessment for the Navajo Nation and Hopi Tribe. The working group met separately with representatives of the Indian groups to tailor the scoping process to their needs. The discussions with the Navajo resulted in a DOE commitment to hold two additional informational meetings for the Navajo sites where travel to a scoping session may be a burden for the community members. At the informational meetings, the DOE, with interpreter assistance, will give a presentation on the PEIS and the Project, followed by small group discussions facilitated by technical specialists from the Project and Navajo interpreters. During the small group discussions, comments or questions will be recorded on flip pads. If people involved in the small group discussions would like their comments entered into a formal record then the comments will be read at a subsequent scoping meeting for the Navajo sites.

Two scoping meetings are scheduled for the Navajo sites. They will be conducted in a similar fashion to the informational meetings with the addition of recorded proceedings and an opportunity for the public to address the entire audience. Project information will be provided to the public prior to public meetings in the form of fact sheets in English and audio cassettes in Navajo.

The Hopi Tribe has requested that an afternoon scoping session be held at the Tribal Council and that an evening session be held at the village community center near the disposal site. The format of the meetings will be similar to that described for the Navajo scoping meetings. However, translation of fact sheets was not requested by the Hopi. Both the Hopi and the Navajo have requested that posters and newspapers be used to announce the meetings.

EVALUATION SUMMARY

To assess the PEIS scoping process, evaluation forms for meeting format and effectiveness, and fact sheet readability and educational content were developed. Results of survey forms completed at each of the sessions held thus far indicate participants favor the opportunities for small group interaction. In addition, many participants made oral comments to the DOE and contractor personnel conducting the meetings.

Public oral and written response to the two-way dialogue format in the small group roundtable sessions was enthusiastic and positive. One of the Project's most vocal critics attended the Falls City, Texas, scoping meeting, and wrote the DOE "was getting better" at addressing public concerns. Other comments included, "The small discussion group is a useful format; why didn't you do this before?" and "This is a very laudable approach." Other comments included:

"The most useful part was meeting face to face with technical people."

"Hearing the public's concerns and the DOE's plan to address them was useful."

"I liked the way you did this meeting, so we could talk to everyone and get some answers."

"The format was excellent."

Participants were also asked several questions about the PEIS process on the written evaluation distributed at all scoping sessions. In addition to the multiple choice answers supplied by the questionnaire, participants were asked, "What was the most useful part of the meeting to you?" Most of the respondents stated they were in favor of the small roundtable groups. (See Table I of Appendix A and Table I of Appendix B.)

When asked "What is the most important improvement the DOE could make in its next public meeting?" the answers were very specific, such as "Condense the explanation of the NEPA process steps" and "Split the roundtable discussions into two groups so that more people could benefit from the total discussions." Respondents urged less use of acronyms in the presentation, simpler overhead slides, and changing the angle on the overhead projector. These responses pinpoint areas where the presentation format can be improved and these types of changes will be incorporated in future scoping sessions.

A further breakdown of the written evaluations on the meeting process is appended to this paper and a summary of the evaluations of the fact sheets.

Evaluation results for both sessions vary; however, both were positive. In Falls City, 76.2 percent of those responding indicated the information conveyed in displays and exhibits was understandable. In Durango, 100 percent responded "about right" to this question. Differences were also noted in question 2, in which 46.2 percent of Falls City respondents said the presentation was informative, while in Durango 66 percent said the presentation was informative. In both communities, an overwhelming number of respondents gave the DOE high marks for their commitment to addressing public concerns. In Falls City, 74 percent and in Durango, 93 percent said the DOE was committed or very committed to addressing public concerns.

The written evaluations also showed that it is extremely important to use a wide variety of media to inform and educate the public about the PEIS scoping sessions. In both Falls City

and Durango, respondents learned of the sessions primarily either through mailings by the DOE or the local newspaper.

The evaluations of the fact sheets are also valuable tools to assess the Project. Efforts to simplify technical information apparently were successful. The majority of respondents, 85.7 percent, indicated that the printed information significantly increased understanding of the Project. Approximately two-thirds, 71.5 percent, indicated that the fact sheets were readable, while 28.5 percent stated the fact sheets were very readable.

The roundtable session concept resulted in a greater number of citizens actually participating in the scoping process by asking questions and providing information and opinions. Comments made during the roundtable sessions were recorded on flip pads then discussed with the entire group during a plenary session. In contrast to the high level of participation exhibited during the roundtable session, participation in the formal, testimony style portion of the meeting was minimal. At Falls City, Texas, two persons gave presentations; at Durango, only three people gave formal presentations.

CONCLUSIONS

In comparing the two scoping processes at Falls City and at Durango the PEIS Working Group determined that the Durango session was preferable. The three-part presentation process used in Falls City did not result in additional public input; a majority of the input came from the small discussion groups and a separate public hearing-type meeting was not productive in terms of soliciting public input on the PEIS scope. The PEIS working group concluded that a single public meeting, focused on obtaining public comments through small group interaction, was the most satisfying, efficient, cost-effective, and productive format for the scoping process. Opportunities for presentations in a large group setting were provided as a courtesy; however, it was apparent that this was not the favored format.

The two-way communication process incorporated meeting format elements to reduce potential adversarial situations and maximize interaction between the DOE and the public. The interactive process, when combined with adequate preparation of agency speakers, creates a responsive process with shared control. Responsiveness and shared control reduce major sources of public distrust. (4) The interactive, small group format humanizes the agency representatives in the eyes of the public, and provides a more satisfying experience for both agency representatives and the public.

Key speakers and members of the PEIS scoping team were well rehearsed in technical issues and meeting facilitation. Dry runs focused on communicating technical issues clearly, conveying responsiveness, and recognizing local citizens as important participants in the decision-making process. The public response to the presentations and the meeting format was predictably favorable and supportive. Agency and industry representatives sometimes believe that public response in meetings is unpredictable. Risk communication research suggests that public response is predictable within limits based on the degree of responsiveness and openness of agency personnel. The UMTRA PEIS scoping experience appears to date validates this hypothesis. Application of research-based risk communication principles substantially increases the probability of a mutually successful public involvement process.

This study resulted in a basic scoping format with built-in adaptability to community needs. The challenge now will be to follow through with a process that maintains public involvement throughout the development of the PEIS. One possible vehicle for public information distribution is a newsletter. Community visits and public meetings at appropriate intervals will maintain the Project's record of public involvement.

REFERENCES

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3. PETER M. SANDMAN, "Risk = Hazard + Outrage: A Formula for Effective Risk Communication," American Industrial Hygiene Association, Cleveland, Ohio. (1991).
4. BILLIE JO HANCE, CARON CHESS, PETER M. SANDMAN, "Improving Dialogue with Communities: A Risk Communication Manual for Government," Division of Science and Research, Department of Environmental Protection, Trenton, New Jersey. (1988).

APPENDIX A
PUBLIC PARTICIPATION MEETING EVALUATION RESULTS
TABLE I
Public Participation Meeting Evaluation Results

| Evaluation Topic | Response | Percentage of Respondents | Actual No. of Respondents |
|---|-------------------------|---------------------------|---------------------------|
| Information conveyed in displays and exhibits | 1. About right | 87% | 25 |
| | 2. Too technical | 4% | 1 |
| | 3. Too simple | 4% | 1 |
| | 4. Other | 4% | 1 |
| Today's Presentation | 1. Informative | 59% | 16 |
| | 2. Somewhat informative | 37% | 10 |
| | 3. Somewhat confusing | 0% | 0 |
| | 4. Confusing | 4% | 1 |
| Today's Presentation | 1. Very clear | 22% | 6 |
| | 2. Clear | 70% | 19 |
| | 3. Confusing | 7% | 2 |
| | 4. Very confusing | 0% | 0 |
| Roundtable Discussions | 1. Informative | 48% | 12 |
| | 2. Somewhat informative | 44% | 11 |
| | 3. Somewhat confusing | 4% | 1 |
| | 4. Confusing | 4% | 1 |
| Could you hear all the information? | 1. Yes | 70% | 19 |
| | 2. No | 30% | 8 |
| Was the room set up effectively for viewing the presentation? | 1. Yes | 85% | 23 |
| | 2. No | 11% | 3 |

**APPENDIX B
FACT SHEETS EVALUATION
TABLE I
Fact Sheets Evaluation Results**

| Evaluation Topic | Response | Percentage of Respondents | Actual No. of Respondents |
|-------------------------------------|--|---------------------------|---------------------------|
| Printed Material | 1. Clear | 100% | 7 |
| | 2. Somewhat clear | 0% | 0 |
| | 3. Somewhat confusing | 0% | 0 |
| | 4. Confusing | 0% | 0 |
| Technical Material | 1. Very readable | 28.5% | 2 |
| | 2. Readable | 71.5% | 5 |
| | 3. Somewhat readable | 0% | 0 |
| | 4. Very unreadable | 0% | 0 |
| Overall Appearance of Material | 1. Attractive | 85.7% | 6 |
| | 2. Average | 14.3% | 1 |
| | 3. Boring | 0% | 0 |
| Review of Project Printed Materials | 1. Significantly increase understanding of the Project | 85.7% | 6 |
| | 2. Somewhat increase understanding of the Project | 14.3% | 1 |
| | 3. Offer no new understanding of the Project | 0% | 0 |

**APPENDIX B FACT SHEETS EVALUATION
TABLE I
Fact Sheets Evaluation Results (Concluded)**

| Evaluation Topic | Response | Percentage of Respondents | Actual No. of Respondents |
|----------------------------------|------------------------------------|---------------------------|---------------------------|
| Materials Presentation of Issues | 1. Very fairly | 57.1% | 4 |
| | 2. Fairly | 42.9% | 3 |
| | 3. Somewhat one-sided | 0% | |
| | 4. Very one-sided | 0% | |
| Most Helpful Materials | 1. Flow Charts | | |
| | 2. Goundwater Cleanup Technologies | | |
| Least Helpful Materials | None were mentioned | | |