THE PSYCHOLOGY OF PUBLIC PARTICIPATION

Barbara Cox, Ph.D. and Julie Kercher
CDM Federal Programs Corporation
San Diego, California

ABSTRACT

As the public becomes more knowledgeable about environmental concerns and health risks, the issue of public participation will become more challenging. The field of risk communication is a key element in environmental clean-up programs and continues to grow rapidly. Waste management organizations must move beyond past practices of simply reassuring the public and instead work to educate and actively involve the public.

This paper presents practical advice for community meetings, based on current research and the authors' experience with the Navy's Installation Restoration program, which was developed in response to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The goal of any environmental organization's community relations program is to involve the public. This information will assist both regulators and the regulated community in accomplishing this goal.

Environmental professionals should take advantage of the extensive research available regarding the psychology of public participation, which incorporates the fields of applied psychology, risk perception, and risk communication. This research is extremely useful when regulations entail right-to-know and public participation requirements.

INTRODUCTION

If you can't be a good example, then you'll just have to be a horrible warning."
Catherine Aird

This paper helps the environmental professional be the good example rather than the horrible warning. It provides practical advice on how to improve public participation in community meetings. This advice is based on empirical research in risk communication and psychology, as well as the authors' experience with clients in projects that involve community relations activities.

Practical knowledge has been drawn primarily from work with Restoration Advisory Board (RAB) meetings. These meetings are part of the Navy's Installation Restoration Program, an environmental cleanup program that mirrors the Comprehensive Environmental Restoration, Compensation, and Liability Act of 1980 (CERCLA). They can be categorized as public meetings hosted by the site owner (generally industry, but in this case, the Navy), which provide human health risk information and education, but do not involve the community in formal decision-making. The first half of the paper focuses on the importance of increasing the public's perception of trust and credibility. The second half addresses methods to conduct public meetings in an effective, productive manner.

RISK COMMUNICATION

When planning a meeting, it is important to consider public perceptions. For example, if the Navy were to host a RAB meeting in a community that had little confidence in the military and/or government's ability to oversee the cleanup, its approach should be different than with a community that is supportive of the Navy. Understanding the basics of risk communication, and how it affects public perception, can improve the meeting and its after-effects. This is especially critical for the types of meetings discussed in this paper, where the main goal is to communicate information to members of the public. It has been shown that the most effective way to help the public feel positive about the situation is to involve them in the decision-making process (1, 2). Given that this is not a tool available for these types of meetings (since the decision-making has been carried out by the site owner and regulatory agencies), what can be done to improve public perceptions?

One option is to involve the public as early as possible. Even if they don't have input into regulatory decisions, they will more easily accept the decision if they have been involved in the process that led to it. In addition, it is important to be honest with the community about any legal constraints that prevent public input in decisions (1).

According to Covello (3), a leader in the field of risk communication, there three primary principles, or truths, of risk communication. First, one must accept that perception is reality; that which is perceived as real, even if untrue, is real to the person and real in its consequences. This is vital to remember when evaluating public perceptions. Facts do not drive perceptions. This has been well documented in risk perception research. A common example is the widespread concern about plane crashes, even though experts and the media continually reiterate that three times as many people die in automobile accidents than in airplane accidents (4).

Secondly, he advocates that effective risk communication is an acquired skill requiring a great deal of knowledge, preparation, and practice. This important to remember when choosing who will present the risk information. Someone who understands the nuances of risk communication, in addition to possessing technical expertise, will be able to respond appropriately to the expected, as well as the unexpected, comments and questions (e.g. "Are you saying that my baby could die from breathing pollution from your facility?"). There are numerous studies and articles available that can provide a solid understanding of public participation and risk communication. However, in order to provide the audience with some practical tools in our brief paper, we will focus on the third principle.

TRUST AND CREDIBILITY

Covello's third principle is that trust and credibility should be the goal of all risk communication. The literature supports Covello's contention that trust has a large effect on risk perception (5, 6). Other sources (7, 8) cite a decline in public confidence and trust in institutions since the 1960's. The public has the least amount of trust in industry, state government and local government (5, 9). At the same time, legislation requiring these organizations to communicate health risks has dramatically increased. Examples include the public participation requirements in the following federal laws and orders:

- The National Environmental Policy Act (better known as NEPA) (1969)
- CERCLA (also called Superfund) (1980)
- The Superfund Amendments and Reauthorization Act (SARA) Title III: the Emergency Planning and Community Right-to-Know Act (1986)
- Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations (1994)
- The Resource Conservation and Recovery Act (especially under the Expanded Public Participation Rule of 1995) (1976)

In the development of the risk communication field, researchers have attempted to delineate the exact determinants of trust and credibility. In one of the earlier studies on risk communication, Renn and Levine (10) posited a set of components that determine perceptions of trust and credibility. The components are competence, objectivity, fairness, consistency, and faith (defined by the authors as goodwill). Expanding on that research, Kasperson, Golding and Tuler (8) proposed four key dimensions of trust: commitment (to a goal and fulfilling fiduciary responsibilities), confidence, caring, and predictability. They suggest that each dimension is necessary to achieve social trust. Furthermore, Covello (11) proposed four similar factors that influence trust and credibility. They fall under the general categories of caring, commitment, competence, and honesty.

Though based on substantial literature and experience, none of the above theories were tested empirically. However, Peters, Covello, and McCallum (7) proposed a theory, then conducted empirical research in order to test their hypotheses. For their study, they built upon previous research and combined the factors determining social trust into three basic categories: concern and care, openness and honesty, and knowledge and expertise. In a cross-sectional, correlational study of 1118 members of the general public, they found strong support that each of these factors is a determinant of trust and credibility.

In examining a separate hypothesis, they found that the key to increasing perceptions of trust and credibility seemed to lie in overcoming a negative stereotype. Specifically for industry, perceived as caring only about profits (negative stereotype), this meant that industry needed to overcome the stereotype by taking an action that would be seen as altruistic, showing concern for public and not purely driven by profits. They cite the example of Johnson and Johnson who, following an isolated incident of tampering in 1982, defied the stereotypical image of industry by voluntarily withdrawing all of its Tylenol products from the stores, costing the company millions of dollars. This act of concern for public health increased public trust and credibility and allowed them to financially recover from the incident. Kasperson and colleagues (8) note that caring is particularly important in situations, such as the RAB meetings, where individuals are dependent on others with greater control, i.e., decision-making power, over the situation. Therefore, this suggests that industry organizations hoping to increase trust and credibility in community meetings which present environmental risk information should focus on ways to establish concern and care for the public, such as noted in the previously discussed examples.

One way to show openness and honesty is to release as much information as possible at the meeting (2, 8). This includes legal requirements, as mentioned earlier, even if they seem to be complicated. Holding onto information has been shown to reduce credibility with the public

(1). Rich and colleagues (2) go even farther, recommending "an open process of accumulating and evaluating information", involving citizens throughout, and access to independent experts. In addition, appearing to manipulate the audience by minimizing risk can also decrease credibility (1). For example, people feel suspicious when an environmental risk is compared to a natural risk that people tend not to be concerned about (like being struck by lightening). Instead, use multiple comparisons or don't use comparisons at all.

Furthermore, address public concerns early in the meeting (1). For instance, if an environmental professional has already been working with the group (such as an ongoing RAB), they will likely have some familiarity with the most pertinent issues. In this case, they should be prepared to address these issues when they present new information. For example, if the group is concerned about contamination of bay water, specifically point out how any new remedial design will prevent contamination from reaching the bay.

If the group has only recently been established, Kasperson and colleagues (8) suggest conducting a "needs assessment" before the meeting to identify public concerns. Another technique is to provide time on the agenda for an open discussion. For example, keep any technical presentations brief, then move to small discussion groups where members can explain concerns and ask questions. This will show members that their concerns are a priority. If it is not possible to address these concerns immediately, deal with them as soon as possible. Keep in mind that individuals often see the meeting as an opportunity to be heard on issues unrelated to the meeting topic. It is best to give the audience a forum to express these feelings rather than dismissing them. If it is not appropriate to address these issues at the meeting (e.g., they are not related to the agreed-upon topic), schedule a separate time to discuss them.

Environmental professionals should be honest about uncertainties in the risk, instead of trying to convince the public that they know all the answers (1). For example, reassure them by discussing ways that uncertainty is being minimized and by showing that the clean up effort is using more conservative numbers in an effort to ensure public safety. Discussing these issues fosters open communication and authenticity.

Knowledge and expertise of the organization and its representatives can significantly affect trust and credibility. Industry personnel are generally seen as being knowledgeable about the environmental requirements of their industry (7). Therefore, as mentioned previously, a key component is choosing the most appropriate people to attend the meeting. The public will be most receptive to someone who clearly understands the technical issues and is able to communicate that to the layperson.

Using the methods and examples discussed in the above paragraphs will build the factors of openness and honesty, concern and caring, and knowledge and expertise, thereby increasing public perceptions of trust and credibility.

Of course, achieving effective public participation is not quite as simple as appearing to care. Feldman and Westpal (12), in their proposed model for public participation, argue that participation alone is not enough to make people feel empowered. The authors quote a federal planning participant as stating "I am not interested in attending a never-ending series of meetings

if they are just supposed to make me feel better because I was involved". In addition, they point out that, "Empty unauthentic gestures devastate residents' ability to trust and feed cynicism". Therefore, in order for a meeting to be effective and gain public support, the risk communicator's actions during the public meeting must be clearly authentic.

Research on the factors determining trust and credibility has lead to some practical rules to follow when conducting public meetings. Vincent Covello and Frederick Allen's (13) "Seven Cardinal Rules of Risk Communication", provides four actions to take during the planning process for a public meeting:

1. Accept and involve the public as a legitimate partner.
2. Plan carefully and evaluate your efforts.
3. Coordinate and collaborate with other credible sources.
4. Meet the needs of the media.

During the meeting, follow the remaining three actions:

5. Listen to the public's specific concerns.
6. Be honest, frank, and open.
7. Speak clearly and with compassion.

Another important source to use while planning a public meeting comes from Caron Chess and Billie Jo Hance (14). They propose that environmental managers should ask themselves the following nine questions before communicating with the public:

1. Why are we communicating?
2. Who is our audience?
3. What does our audience want to know?
4. What do we want to get across?
5. How will we communicate?
6. How will we listen?
7. How will we respond?
8. Who will carry out the plans? When?
9. What problems or barriers have we planned for?

They also suggest evaluating the risk communication after the meeting by asking, "Have we succeeded?" There is extensive literature discussing evaluation of risk communication, but it is beyond the scope of this paper.

As past research has shown, trust and credibility must be the cornerstone of any public meeting on environmental health risk. Without these, any efforts toward the process of the meeting will be thwarted. As Crowley argues, "if [citizen participation] is not done well, it may be better not to do it [at] all. Bad process is more disempowering than no process" (12). Therefore, the basis of any effective public participation hinges on establishing trust and credibility. Once established, the focus should turn to the process of planning and conducting the meeting itself.

EFFECTIVE MEETINGS

In the field of organizational psychology, research on conducting effective meetings has identified numerous factors in meeting facilitation. Conducting effective meetings consists of several key elements (15, 16, 17). In this paper, the discussion will focus on three main elements of an effective meeting: planning the agenda, facilitating the meeting and follow-up on meeting issues.

First, effective public participation involves planning the meeting agenda, which requires a clear purpose(s) (18). Even if the purpose is implied, the coordinators need to agree on the core purpose and goal of the meeting, since environmental issues can evoke strong emotional responses from the public. Getting caught in an emotional outbreak can veer the group away from the original purpose of the meeting (16). An example pertinent to the RAB meetings would be the following: 'the purpose of the Restoration Advisory Board meeting is to inform the public, increase awareness of environmental issues, and address issues of concern, thereby allaying perceptions of fear or danger and giving reassurance'. Other purposes for public meetings on environmental issues might include: informing the public, educating the public, generating ideas, clarifying clean-up goals, evaluating progress, providing feedback, problem-solving, or gaining a community commitment to a clean-up goal.

As part of the agenda, define what the desired outcome(s) of the meeting should be. For example, "At the conclusion of this meeting, RAB members will understand the basics of the Installation Restoration (IR) program, will commit to attend meetings regularly, and voice their concerns in a clear but cooperative manner." When defining outcomes, they should be brief, specific, and measurable, which is the definition of a behavioral measure (19).

In regard to agenda planning, determine who should attend. For instance, decide who should be on the mailing list, who should receive public relations material, and who should receive fact sheets. Attendees usually are included because they have relevant information or expertise (e.g., presentations on the CERCLA/IR process, remediation activities), because they are affected by the decisions (e.g., residents) or because they will carry out the decisions (e.g., regulators).

Then, create an agenda. On the agenda, briefly state the purpose and desired outcome(s) of the meeting, list agenda topics, and set time limits for each item.

Be willing to modify the format of the meeting to meet the goals that have been set (18). For example, if members are upset and need to have time to speak, forego the usual technical presentation and add a block of time for open discussion.

The second key element of an effective meeting is to facilitate during the meeting. This involves determining the meeting roles. For example, meeting roles include the chair who is the main facilitator (and should be a neutral party if possible), the co-chair who is a back-up facilitator, the members of the committee or board, and the general audience. At the beginning of the meeting, the facilitator should review the agenda outline; using an agenda establishes group norms of behavior, which are either expressed or unspoken codes of behavior (e.g., "This

is what we are going to address at this meeting"). Therefore, after having reviewed the agenda, it is appropriate for the chair or co-chair to keep the group on-track.

Furthermore, the facilitator's role is to encourage public participation. Process comments bring out more participation, whereas content comments discourage participation. In order to have helpful public participation, the facilitator needs to keep the group on track by focusing on the agreed-upon topic, as well as quickly handling challenging behaviors before they become overwhelming. For example, if the meeting is dominated by one or two people, the facilitator takes on a neutral role of keeping people on track, and pulling in other members, i.e., "Jim, what ideas do you have on (fill in with the appropriate issue, increasing attendance, etc.)". As part of the facilitation process, let the attendees know that minutes are recorded including decisions, agreements and actions - the who, what, when, where, and how details.

The third key element of an effective meeting is to follow-up (on any action items, public concerns not addressed in the meeting, items for the next meeting agenda, etc.). Follow-up should include evaluation of the meeting (8, 18). This could be as simple as collecting feedback from members about whether the meeting was successful.

There are some common meeting problems that arise when the three key elements are not addressed (16, 20), which include:

- In the process, members use personal attacks in the meeting (meaning that rules for addressing group members have not been implemented by the facilitator).
- There are unclear roles and responsibilities, manipulation, or hidden agendas.
- In giving information, there is data overload or repetition and wheel-spinning.
- In discussing decisions, decisions are presented as black and white, instead of presenting them as the best compromise in which everyone feels that they 'win' something.
- Regarding the setting or environment, the seating could be arranged poorly (e.g., the authorities versus the public, where the authorities are in front or up higher and the public is in the back or lower. A circular-type or mixed arrangement that does not imply rank engages more cooperation, with regulators, military or industry personnel and the public in mixed seating engenders a more cooperative feeling as well).
- In follow-up, problems occur when expectations and action items are not clearly spelled out, if there is a lack of planning for future meeting issues, or if no action is taken on an action item- this will lower credibility (e.g., don't promise something you can't deliver).

FACILITATOR ROLE

As exemplified in the above discussion, the role of the facilitator is central to gaining public participation and having effective meetings (15, 16, 20). In this section, the discussion will focus on the key actions in the role of facilitator. These key actions are derived from a variety of sources noted in the bibliography (15, 16, 17, 20), along with the authors' personal experiences in dealing with the public. First, the facilitator needs to contract with the group to engage them/increase participation by doing the following:

- Stressing their role as <u>neutral</u> facilitator

- Emphasizing that the meeting is for the whole community
- Stating how they will ensure the group's ideas are accurately recorded
- Asking how they can help to increase participation at the start
- Encouraging all participants to help facilitate group participation, which gives group members a sense of purpose and involvement. In this process, it is vital to be sensitive to different cultural and social backgrounds. Cultural sensitivity should also take into account different information needs and learning styles.

Then, the group facilitator can utilize several tools to ensure a smooth meeting process. Facilitative behaviors include both preventative actions (i.e., an action taken which prevents a problem from occurring) and intervention actions (i.e., an action taken to intervene after a problem has developed). Preventative actions include:

- Establish ground rules (e.g., rules of operations) and follow them (or else the group does not believe the rules are meaningful, then chaos is the rule).
- Define roles.
- Get agreement on how the meeting process should go (e.g., suggest a process and get group input).
- Get agreement on content/topics.
- Be positive; frame decisions as win-win.
- Educate new members on the process rules.
- Get 'permission' from the group at the beginning to enforce the meeting process agreements.
- Get the group to take responsibility for its actions.
- Get group 'ownership' of agenda items.

Intervention actions include:

- The 'Boomerang' technique: give a question back to the group to get them involved; let group members find solutions, i.e., for membership ideas-"what do you think we should do?"
- Regain focus, i.e., "Are you addressing the issue of_____?" or "Let's work on one thing at a time."
- Play dumb (like the Boomerang technique): If the group is off track, get the group to notice it, i.e., "Where are we on the agenda?"
- Say what is going on in a neutral manner, i.e., "It seems to me___." or "My sense is _____." Identifying and describing a destructive/maladaptive behavior to the group is sometimes enough to change the behavior. Be sure to 'check for agreement' (get agreement/alignment with others) on this type of process statement.
- Check for agreement, i.e., "If there are no objections (pause), we'll move on to_____."
- Enforce process agreements (the rules of operation).
- Encourage, i.e., "Could you say more about that?" or "I think this is useful."
- Accept/legitimize/or defer, i.e., "Can you hang on for 10 more minutes to see what happens on_____."
- Avoid defensiveness if threatened, use neutrality, i.e., "I cut you off?/You weren't finished? I'm sorry…You wanted to clarify the issue of____." (However, if someone is over the time

limit or not following rules, either the chair or co-chair needs to reiterate and enforce the rule.)

By using a combination of these techniques, the facilitator can improve public participation in discussions of environmental clean-up issues.

CONCLUSION

Current research in applied psychology, risk perception, and risk communication has important lessons for environmental professionals involved with public meetings. It has shown the importance of establishing public trust and credibility and provides steps for achieving this within the community. It also provides methods for planning and conducting effective meetings, which foster cooperative interactions with the public. Using this information, organizations can improve the process of public participation in environmental projects.

REFERENCES

1. B. J. Hance, C. Chess, and P.M. Sandman, "Setting a Context for Explaining Risk," *Risk Analysis*, **9**, 113-117 (1989).
2. R. C. Rich, M. Edelstein, W. K. Hallman, and A. H. Wandersman, "Citizen Participation and Empowerment: The Case of Local Environmental Hazards," *American Journal of Community Psychology*, **23**, 657-676 (1995).
3. V. T. Covello in Agency for Toxic Substances and Disease Registry's *A Primer on Health Risk Communication Principles and Practices* (ATSDR Web site: http://www.atsdr.cdc.gov/HEC/primer.html, 2000).
4. B. Glassner, *The Culture of Fear: Why People are Afraid of the Wrong Things* (Basic Books, New York, NY, 1999).
5. P. A. Groothuis and G. Miller, "The Role of Social Distrust in Risk-Benefit Analysis: A Study of the Siting of a Hazardous Waste Disposal Facility," *Journal of Risk and Uncertainty*, **15**, 241-257 (1997).
6. M. Siegrist and G. Cvetkovich, "Perception of Hazards: The Role of Social Trust and Knowledge," *Risk Analysis*, **20**, 713-719 (2000).
7. R. G. Peters, V. T. Covello, and D. B. McCallum, "The Determinants of Trust and Credibility in Environmental Risk Communication: An Empirical Study," *Risk Analysis*, **17**, 43-54 (1997).
8. R. E. Kasperson, D. Golding, and S. Tuler, "Social Distrust as a Factor in Siting Hazardous Waste Facilities and Communicating Risks," *Journal of Social Issues*, **48**, 161-187 (1992).
9. L. J. Frewer, Hedderly, and Shepherd, "What Determines Trust in Information About Food-Related Risks? Underlying Psychological Constructs," *Risk Analysis* **16**, 473-486 (1996).
10. O. Renn and D. Levine, "Credibility and Trust in Risk Communication" in Kasperson and Stallen (Eds.) *Communicating Risks to the Public* (Kluwer Academic Publishers, Dordrecht, the Netherlands, 1991).
11. V. T. Covello, "Trust and Credibility in Risk Communication," *Health and Environmental Digest*, **6**, 1-3 (1992).

12. R. M. Feldman and L. M. Westphal, "An Agenda for Community Design and Planning: Participation and Empowerment Practice," *Sustaining Human Settlements: Economy, Environment, Equity and Health*, **12**, 34-37 (1999).
13. T. Covello, *Seven Cardinal Rules of Risk Communication*, (U. S. Environmental Protection Agency, Washington, D. C., 1988).
14. C. Chess and B. J. Hance, "Communicating with the Public: Ten Questions Environmental Managers Should Ask," (Center for Environmental Communications, Cook College, New Jersey, 1994).
15. R. J. Hackman, (Ed.). *Groups that Work: And Those that Don't* (Jossey-Bass, San Francisco, CA, 1990).
16. R. M. Schwarz, *The Skilled Facilitator: Practical Wisdom for Developing Effective Groups* (Jossey-Bass, San Francisco, CA, 1994).
17. M. Moscowitz, personal communication (2000).
18. C. Chess and K. Purcell, "Public Participation and the Environment: Do We Know What Works?" *Environmental Science and Technology*, **33**, 2685-2692 (1999).
19. J. C. Masters, T. G. Burish, S. D. Hollon, and D. C. Rimm, *Behavior Therapy: Techniques and Empirical Findings* (Harcourt Brace Jovanovich, San Diego, CA, 1987).
20. M. Doyle and D. Straus, *How to Make Meetings Work: The New Interaction Method* (Berkley Publishing Group, Berkeley, CA, 1977).