

## PUBLIC INVOLVEMENT IN ENVIRONMENTAL, SAFETY AND HEALTH ISSUES AT THE DOE NUCLEAR WEAPONS COMPLEX

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### ABSTRACT

The state of public involvement in environmental, safety, and health issues at the DOE Nuclear Weapons Complex is assessed through identification of existing opportunities for public involvement and through interviews with representatives of ten local citizen groups active in these issues at weapons facilities in their communities. A framework for analyzing existing means of public involvement is developed. On the whole, opportunities for public involvement are inadequate. Provisions for public involvement are lacking in several key stages of the decision-making process. Consequently, adversarial means of public involvement have generally been more effective than cooperative means in motivating change in the Weapons Complex. Citizen advisory boards, both on the local and national level, may provide a means of improving public involvement in Weapons Complex issues.

### INTRODUCTION: PURPOSE AND SCOPE

The United States Nuclear Weapons Complex, currently the responsibility of the Department of Energy (DOE), has captured the attention of the nation as it faces a costly, lengthy and complicated process of cleaning up environmental contamination, storing, treating, and disposing safely of current and future wastes, and ensuring the safety of workers at the weapons facilities and the public in surrounding communities. This effort will require the cooperation of many, including DOE, EPA, states, Congress, private contractors, and the general public.

For the Nuclear Weapons Complex which historically has operated under conditions of strict secrecy, isolated from the rest of society, such cooperation represents a new way of doing business. Ways of ensuring cooperation among diverse groups, many of which have very different goals, will have to be developed if limited resources are to be used wisely in addressing the myriad environmental, safety, and health problems which exist at Nuclear Weapons Complex facilities across the country.

The development of effective means of facilitating cooperation requires an understanding of the needs and concerns of the various groups as well as an understanding of both the historical and current relationships among these groups. This paper reports on a study conducted during the period from June 1990 through May of 1991 to develop an understanding of past and present relationships between Weapons Complex facilities and the public and to provide a description of the state of public involvement in environmental, safety, and health issues at nuclear weapons facilities (1). The focus is largely on the experiences of people involved in issues on the local level, though some consideration is given to public involvement activities on a national level.

This paper grew out of work begun by one of us (Taylor) as part of an internship at the Congressional Office of Technology Assessment during the summer of 1990. During that

time, telephone interviews were held with representatives of ten citizen and environmental groups. Newspaper and magazine accounts, transcripts of Congressional hearings, and DOE documents explaining their views and initiatives in public involvement were also useful sources of information.

### LACK OF PUBLIC TRUST IN DOE; WHY PUBLIC INVOLVEMENT IS NECESSARY

The overwhelming evidence is that secrecy contributed to environmental, safety and health problems within the Weapons Complex by shielding the complex from those who might have demanded that more attention be paid to these issues. The history of secrecy has also left DOE with severe credibility problems. The fact that potentially health-threatening conditions have existed throughout the Weapons Complex for decades, but did not start to become public knowledge until the 1980s has led many people living near DOE facilities to conclude that DOE cannot be trusted to look out for their well-being.

Skepticism about DOE's honesty is evident in comments such as those of an Idaho rancher after learning about a secret history of radioactive emissions from DOE's Idaho National Engineering Laboratory (INEL) in Twin Falls, Idaho. He said, "We raise cattle and kids and we've had no tragedies so far as I can tell. But now we find out they've been dumping radiation on us. Why did they keep it secret? It makes you think. What else are they hiding?" (2) The Twin Falls newspaper, the *Times-News*, ran an editorial in response to the disclosure of past radioactive emissions warning that "Idahoans must protect themselves" from INEL (3). Similarly, Carl Johnson, a former health officer in a Colorado county neighboring DOE's Rocky Flats plant who maintained that he was forced out of his job for watching Rocky Flats too closely, said, "Communities near nuclear weapons and nuclear power facilities must insist on detailed investigations of all activities and emissions" (4). Neighbors of the Hanford facility have also become angry and distrustful, especially following the 1986

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disclosure of documents that described the "green run," a December 1949 experiment during which Hanford and neighboring communities were deliberately contaminated with large amounts of radioactive iodine. One resident said, "I can't trust Hanford. They've lied and covered up. I think they're killing us" (5).

Bitterness such as that evident in the comments cited above has led Keith Schneider, an award-winning correspondent for *The New York Times* on Weapons Complex issues, to pose the question, "How can the United States conduct its nuclear weapons policies effectively when one of the least trusted and most feared bureaucracies is in charge of building nuclear arms?" (6) DOE itself has begun to ask similar questions, acknowledging that "a tradition of keeping virtually every aspect of weapon production secret has damaged its ability to function." (7)

If DOE is to meet Secretary Watkins' goal of "regain[ing] the credibility needed to get on with the complex energy-related tasks at hand" (8), excessive secrecy must be eliminated. There is no other choice. There was a time when people would believe facility managers who told them secrecy was being maintained in the interest of national security and the government was taking care of health, safety, and the environment, but that time is past. It is now evident that while carrying out their production mission in secret, those operating the Weapons Complex paid insufficient attention to health, safety, and environmental issues. People who feel they have been lied to for years must now be able to verify for themselves that health, safety, and the environment are being protected.

While there are strong arguments to be made for the necessity of keeping certain information regarding weapons production classified, it must be realized that national security is at least as dependent on protecting our own natural environment as on protecting ourselves from other nations. As Senator John Glenn noted in comments on the Weapons Complex, "We cannot sacrifice safety for national security. The two must be treated as equally important. . . . It will do us little good to protect ourselves from the Russians if we poison our own people in the process" (9). It will not be necessary for DOE to operate in a totally declassified environment in order to re-establish credibility. The Department will, however, have to be much more discriminating about what information it chooses to classify. DOE cannot continue to use secrecy as it has in the past to hide information on environmental abuses and safety lapses from the public.

Dismantling the secrecy culture will require both sharing information more freely with the public and allowing more input from the public into the decision-making process. Several pieces of federal legislation include provisions designed to advance these means of involvement; the most important of these laws are the Freedom of Information Act (FOIA), the National Environmental Policy Act (NEPA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), and the Resource Conservation and Recovery Act (RCRA). Furthermore, under Secretary Watkins, DOE has undertaken several initiatives in an attempt to answer the call for more public involvement in the Department's decision-making processes. These existing means of public involvement, as of Spring, 1991, are discussed and analyzed elsewhere (1).

## CITIZENS' PERSPECTIVES ON PUBLIC INVOLVEMENT

In an effort to determine how effective DOE's plans to restore credibility through public involvement have been to date, interviews were conducted in the summer of 1990 with representatives of local citizen groups and environmental groups active at weapons facilities in their communities. No attempt was made to identify every active group. Rather, the goal was to interview at least one group at every site where groups could be identified.

Of the 15 principal sites comprising the Weapons Production Complex, groups active in environmental, safety, and health issues were identified at nine sites. At six of these nine sites, representatives from one group per site were interviewed. At the seventh site, representatives from two groups were interviewed. At the eighth site, representatives from three groups were interviewed. At a ninth site, no interview was conducted. In all, 14 individuals from 10 groups were interviewed.

The foreword to the 1990 edition of DOE's Five-Year Plan states, "The Department is committed to meaningful public participation in its Environmental Restoration, Waste Operations, and associated Technology Development activities" (10). This commitment must be obvious to the public if DOE's goal of re-establishing credibility is to be achieved. Therefore, the interviews were designed to determine how evident DOE's professed commitment to public involvement is to concerned citizens in communities near weapons facilities, and what else, if anything, DOE should do to make the commitment more evident.

Table I summarizes responses to questions about communication with DOE. As of the time of the interviews, many citizen groups active in Weapons Complex issues did not believe that DOE was making a real effort to communicate with the public or to involve the public in decision-making in any significant way. Table II summarizes the interviewees' thoughts on whether a "new culture" of openness has emerged at DOE. Few, if any, citizen groups active in Weapons complex issues perceived that a new culture exists at Weapons Complex facilities. Table III summarizes specific suggestions for improving public involvement. The overwhelming consensus of those interviewed was that the fundamental problem is DOE is not attempting to "actively involve the public" in its decision-making process at the local level. More detailed information about the interviewees and their responses is available (1).

## HOW PUBLIC INVOLVEMENT HAS DRIVEN CHANGE

The frustration of those who have attempted to involve themselves in DOE's decision-making processes is evident from the interviews with representatives of citizen groups. However, it was concerned citizens, together with Weapons Complex workers, the media, and Congress who exposed severe environmental and safety problems at DOE facilities and brought DOE acknowledgement that such problems existed. While citizens may not feel they are able to communicate effectively with DOE on a day-to-day basis, they have, by filing lawsuits and organizing campaigns around specific issues, been instrumental in causing significant changes in the way the Weapons Complex does business.

TABLE I

## Interviewees' Perspectives on Communication with DOE

Securing Written Information

- No group feels that it is getting the information it needs from DOE.
- It often takes a long time to get information from DOE.
- Some feel it has become easier to get information in recent years, some feel it has become more difficult.

FOIA Requests

- In general, FOIA can secure requested information.
- It is necessary to be extremely specific in making requests.
- It often takes a long time for requests to be processed.
- Information often arrives with blacked-out portions.

Public Affairs Offices

- Most groups feel that public affairs office personnel try to be helpful, but that the offices serve primarily as insulation between those inside DOE and those on the outside.
- Offices tend to be understaffed and underfunded.
- It is sometimes cumbersome to use public affairs officers as middlemen between the public and DOE technical experts.
- The duties of personnel are not designed to enable them to actively involve the public.
- Offices do not send out enough routine information which is not specifically requested.

Public Meetings and Hearings

- Meetings and hearings are not well-publicized.
- Meetings and hearings occasionally have been productive, but were generally found to be unsatisfactory.
- Hearings provide a necessary opportunity for official public comments.
- There is often insufficient opportunity for informal question and answer periods.
- Meetings are often used by DOE to prove that the public is involved, but meetings are generally not perceived by those interviewed as having an impact on DOE policies or actions.
- Technical information is not presented in an understandable fashion.

TABLE II

## Interviewees' Thoughts on DOE's New Culture

- Bureaucracies change so slowly that it may be too early to tell whether a new culture is emerging, but no new culture is yet evident.
- Most groups have seen some evidence of more effort to involve the public in certain instances or from certain individuals.
- There is disagreement among groups as to whether or not Secretary Watkins wants more public involvement.
- There is a struggle within DOE between those who want to change the culture and those who prefer the status quo.
- Much more change will be necessary before it can be definitively stated that those who want to change the culture are winning.

It was a lawsuit filed by environmental groups that compelled DOE to comply with RCRA. A citizens' campaign against a planned plutonium production facility at INEL called into question the need for plutonium and helped lead

to the eventual cancellation of the project. It was prolonged pressure from a public interest group that precipitated DOE's release of worker health records for study by independent

TABLE III

## Interviewee Suggestions for Improving Involvement

- Each facility should maintain mailing lists of people interested in being notified of public meetings and of organizations interested in receiving press releases and routine environmental documents.
- Facilities should establish public access computer databases.
- Document repositories should be established in neutral locations.
- Each facility should regularly publish an acronym-free newsletter.
- Public affairs offices should have larger staffs.
- There should be frequent small-group discussions between DOE/contractor personnel and members of the public.
- Facility employees should participate in public forums run by independent mediators.
- The UCNI [Unclassified but Controlled Nuclear Information] designation should be abolished.
- States should organize public education/involvement programs with funding from DOE.
- There should be frequent informal public meetings.
- DOE should document and address public concerns in all summaries of public meetings.
- Members of the public should provide input to the format and agenda of each public meeting.
- DOE should come to see taxpayers as partners.

researchers. Public involvement appears to have been a factor in these and other instances (1).

Lawsuits by citizen groups have been filed under NEPA in order to compel DOE to perform Environmental Impact Statements. As of 1990, only one of these cases was actually resolved in court; in the other cases, either the project at issue was canceled or DOE agreed to perform the EIS (11). A recent, significant example of this process was DOE's decision to perform a Programmatic Environmental Impact Statement for modernization of the entire Weapons Complex. Public participation in the form of lawsuits, threat of lawsuits, and political pressure has been able to significantly influence DOE decision-making regarding environmental, safety, and health issues.

Despite the fact that adversarial means of public involvement have resulted in some important changes, it would be better if there were more opportunities for public involvement during DOE decision-making so that the need for lawsuits and political pressure could be reduced. A major drawback to DOE of adversarial means of public involvement is that they are poorly suited to re-establishing DOE credibility. This is because lawsuits and protests pit members of the public against the Department and perpetuate the "us versus them" mentality which has grown out of the secrecy culture.

Furthermore, constant public challenging of DOE proposals and actions is expensive. Litigation is not cheap. Perhaps more importantly, when a project which was the result of a unilateral DOE decision is canceled in the face of strong opposition, some or all of the money already spent on that project is likely to be wasted: \$588 million had been spent on the Hanford Special Isotope Separation Plant (SIS) before it was canceled (12).

"No agency can survive if every action it takes is challenged or questioned" (13). The history of secrecy and lack of attention to environmental, safety, and health issues has left DOE in a position where virtually every action it takes is challenged or questioned. If this is to change, DOE must

commit itself to involving the public throughout its decision-making processes.

#### THE DECISION-MAKING PROCESS: DOE INVOLVEMENT

An outline of the general steps which should be involved in the making of any major agency decision has been developed for this study as a means of analyzing existing opportunities for public involvement in DOE decision-making. (See Table IV). Two key stages in most decision-making processes are stages 4 and 5. It is during the debate over the relative importance of various issues and the formulation of possible plans of action that the critical work is done. If compromises are to be worked out, these are the stages where that will most likely happen. Public involvement in these stages is important if members of the public are to believe that DOE is seriously considering public concerns. The responsibility for actually making many decisions, stage 6, must ultimately lie with either DOE or appropriate regulatory bodies. Effective public involvement during the stages leading up to a decision, however, should improve the likelihood that each decision adequately addresses public concerns and that the public understands the rationale behind the decisions.

Though no Department-wide provisions exist for involving the public at all stages of all decision-making processes, there have been a few situations in which more comprehensive public involvement in decision-making has been attempted. In DOE's development of a cleanup *priority-setting* system, the External Review Group, was supposed to allow for public involvement throughout much of the decision-making process. In theory, ERG was to work with DOE as a partner in developing the priority-setting system. Throughout much of the development process, however, ERG members did not feel that DOE valued their input. The Hanford Environmental Dose Reconstruction Project has been much more successful in involving the public in all stages of its activities; a reason may be that leaders of the Dose Reconstruction Project are convinced that the objective of achieving public credibility is

TABLE IV

## Existing Public Involvement Provisions Within Stage-by-Stage Decision-Making Framework

## 1 - IDENTIFICATION OF PROBLEM:

- FOIA requests
- Environmental Hotline
- Meeting between Secretary Watkins and citizen group representatives

## 2 - DEVELOPMENT OF UNDERSTANDING OF PROBLEM:

- CERCLA document repository
- CERCLA technical assistance grants
- FOIA requests
- Public meetings
- Public affairs offices
- Newsletters
- Meeting between Secretary Watkins and citizen group representatives

## 3 - IDENTIFICATION OF ISSUES TO BE CONSIDERED:

- Public comment periods on issues to be considered in preparation of EIS

## 4 - DEBATE OVER RELATIVE IMPORTANCE OF ISSUES: None

## 5 - FORMULATION OF POSSIBLE PLANS OF ACTION: None

## 6 - DECISION: None

## 7 - REVIEW OF DECISION:

- Public comment period on proposed cleanup plans under CERCLA
- Public comment period on draft EIS
- Public right to contest proposed issuance of RCRA permit
- Public comment periods on Site-Specific Plans and Five-Year Plan

## 8 - REVISION OF DECISION: None

## 9 - IMPLEMENTATION OF DECISION: None

NOTE: This table is not all inclusive. See Taylor (1).

as important as anything else they are trying to accomplish. Other mechanisms include DOE's Advisory Committee on Nuclear Facilities Safety (now defunct) and the Hanford Defense Waste Citizens Forum (1). Analysis (see Table IV) reveals that DOE initiatives allow for public involvement primarily in stages 1, 2, and 7 of the decision-making process: identifying problems, understanding problems, and reviewing DOE decisions. Provisions for public involvement are lacking entirely from several stages of most decision-making processes, including the vitally important fourth and fifth stages.

#### CREATING ADVISORY BOARDS TO FACILITATE PUBLIC INVOLVEMENT

In its 1991 report, *Complex Cleanup*, the Congressional Office of Technology Assessment presented a policy option which appears to have potential as a first step towards facilitating effective public involvement in Weapons Complex decision-making. OTA suggested that Congress consider

mandating the creation of an advisory board at each facility in the Complex as well as a coordinating national advisory board (14). The establishment, at each facility, of a small, independent group with scientific and technical expertise as well as close connections to the local community could be used as a means of overcoming obstacles to effective public participation in DOE decision-making. Such site-specific advisory boards could provide the public with information and facilitate communicating public concerns to DOE. OTA gave little detail on the organization and functions of these boards. Table V provides a summary of some functions that such a board might perform. Table VI provides suggestions as to the possible functions and organization of a National Board that serves to network the site-specific boards.

It is believed that these boards could bridge the gulf between insiders and outsiders so that workable plans for addressing environmental, safety and health problems throughout the Weapons Complex can be developed. If the

TABLE V

## Site-Specific Boards: Possible Functions

## Serve as a means of indirect communication between the public and DOE facilities

- Hold frequent public meetings
- Work as partners with DOE facilities in developing plans and programs for addressing environmental, safety, and health problems
- Review DOE technical information and present it to the public in an understandable form

## Improve direct communication between the public and DOE facilities

- Work with public affairs office to develop mailing lists
- Assist in advertising and developing agendas for DOE's public meetings and hearings
- Mediate DOE Hearings
- Help facilities prepare summaries of meetings and hearings
- Help DOE and contractor officials communicate in a way which is understandable to non-scientists
- Advise DOE on format and content of newsletters
- Assist in identifying documents for declassification
- Help facilities establish comprehensive document repositories and public access databases
- Help DOE integrate legislative public participation requirements into a comprehensive public involvement program

TABLE VI

## National Board: Possible Functions and Organization

## Functions

- Maintain close contact with site-specific boards
- Synthesize concerns and recommendations of site-specific boards for use in national planning
- Keep up to date on environmental, safety, and health issues under consideration at DOE headquarters
- Provide site-specific boards with a Complex-wide perspective on issues Arrange annual or semi-annual forum with representatives from site-specific boards
- Participate in DOE public involvement efforts such as Stakeholder Forum and ERG
- Advise DOE on revising and expanding public participation programs
- Provide opportunity at all meetings for public questions and comments

## Organization

- DOE headquarters commits to cooperating with board
- Federally funded, but not through DOE
- Members appointed by Congress
- About ten members, two of whom would be full-time
- Some members have technical expertise, some have experience with public involvement
- Diversity of viewpoints among members
- Members serve as individuals, not as representatives of other organizations
- Full board meets at least once a month

boards are to be successful in this mission, they must have the support of the public. Their members must be carefully chosen, and members must keep in mind that the objective of achieving public credibility is as important as anything else they try to accomplish.

In the end, the success of the boards will depend on DOE's willingness to cooperate. If DOE decides to treat board members and the public in general as something less than partners in the mission to clean up and safely operate the Complex, the quality of the cleanup and the safety of future

operations will be compromised and the Department will continue to face opposition from people who do not trust its motives. If, however, DOE recognizes the value of allowing the boards and the public to participate extensively throughout decision-making processes, much can be accomplished.

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