Emergence of interest groups on hazardous waste siting: how do they form and survive?

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CONF-860205--3

DE86 004045

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1 INTRODUCTION

The disposal and siting of hazardous and radioactive wastes has created numerous problems for decision-makers in the field of waste management. The social/political problems have proven to be some of the most difficult to solve. Public knowledge of the presence of hazardous and radioactive waste sites has grown considerably in recent years. Over the same period, the process of choosing new disposal sites has attracted a great deal of publicity. In many cases, when existing sites are discovered or when a community is being considered for a new disposal site, organized groups emerge in the community to support or oppose the proposed actions and the decision-makers responsible.

As indicated by Wood (1982:211), "Local opposition groups form a broad base of antinuclear activity." Sweeney (1979:I-32) states, "Every major nuclear facility in the U.S. has a consensus organization of some kind around it working to stop it." It has been the experience of most practitioners in the field of waste management that groups inevitably emerge in relation to radioactive waste issues. These groups share characteristics with other citizens' opposition groups and other so-called "emergent" groups. Emergent groups are a form of organized collective action in response to a particular situation or event, such as the siting or discovery of a hazardous waste disposal site. Sociological methods and theory can provide insight on the patterns common to these groups, their emergence, and their survival or decline. The questions addressed in this paper are: what are the variables that lead to the formation of such groups, and what conditions or group actions contribute to their growth and survival?

2 FORMATION

Several sociological theorists have explicitly or implicitly recognized the need for a "facilitative social context" (Quarantelli 1984) from which collective action could emerge. This setting is necessary for action to occur, but is not sufficient to cause it to occur. The components of this conducive setting differ, depending on the theoretical perspective adopted. Most theorists assume a cognitive component to the setting, a general discontent or grievance, and a shared

belief of what is unsatisfactory among the population. However, they differ in the sufficiency of this setting to provoke collective action. One group (e.g., Gamson 1975; Tilly 1978; Aminzade 1984) argues for a strong organizational component in the group formation in addition to the general discontent, e.g., leadership, availability of resources, experience. Another group (e.g., Smelser 1963; Turner 1981) argues that belief alone is a sufficient motivating force. In general, the facilitative setting for group formations can be divided into ideological and organizational components.

The ideological component consists of the basic ideas about the waste and the technology that produces the waste. In the case of radioactive waste, a feeling of general discontent is replaced by general fear of a technological hazard. Usually, the hazard is perceived as more risky if exposure to it is involuntary, is potentially catastrophic, has effects on later generations, and is uncontrollable (Covello 1983). All these characteristics apply to natural disasters, and most apply to technological hazards. Technological hazards, as man-made risks, are a special concern to citizens, however, because they are perceived as being understood by scientists and potentially controllable. Thus, part of the facilitative social setting to collective action on radioactive waste is the cognitive component of perception that action to effect control of the hazard can reduce the level of risk.

Group formation is also more likely in a facilitative social context, i.e., when "an organized protest ideology is already available" (Walsh 1981:18). There have been many well-publicized examples of successful, organized citizen actions on technological hazards--e.g., at Three Mile Island, at Love Canal, and protests against construction of nuclear power plants. The orientation of the environmental movement provides a ready base for a protest ideology. In fact Gladwin (1980) found that waste storage and transportation elicited the strongest opposition from national environmental groups.

The organizational component of the social setting creates the "possibility of acting" (Quarantelli 1984). This component has a number of elements: availability of flexible resources (Walsh 1981; Campbell and Garkovich 1984); proximity to population centers for recruiting members; experience in organizations; and availability of local mass media for publicizing the group's existence, position, and actions (Aminzade 1984). Flexible resources consist of, for example, discretionary time and money. People with discretionary time and resources are often found in communities with some wealth. Women not employed outside the household, or business people who see it as their role to be active in community causes, are examples of people who may have discretionary time. It is not necessary in a given location to have the facilitative setting indigenous to the area for groups to emerge. Components of the facilitative setting can be produced if missing. One can create a media event (nonevent); and organizational skills, resources, etc., can be brought in from outside the area.

It is important to note that conducive structural characteristics of the social setting do not guarantee collective action (Martin and Wilkinson 1984). The costs of starting an organization are too high if all that exists is a supportive social setting (Klandermans 1984). Conducive structural characteristics are necessary, but are not sufficient conditions for the emergence of a group.

3 GROWTH

Groups need to gain members to experience growth. Growth is important to increase available resources (money, labor, organizational skills). Growth can make the group appear to represent a larger portion of the population and to be more powerful (physically and politically). Growth can also make the group a more interesting subject for the mass media.

Groups experience a growth problem, however, when people consider joining the group but think that any potential benefits to the individual would be outweighed by the costs (time, money, energy) of participation. Olson (1965), in his book The Logic of Collective Action, indicates that the tendency is for people to be "free riders", that is not contribute to the group because the work is already being done. Olson stresses the rationality of the decision to participate, i.e., one will participate if the benefits outweigh the costs, generally measured in terms of economics and the effectiveness of participation. Others recognize that the "benefits" of participation may be psychic rather than economic--based on emotional commitment to a cause, not necessarily on the effectiveness of the group--and this idea is supported by others (Aldrich 1979; Moe 1980; Turner 1981; Walsh 1981). Emotional commitment would provide sufficient motivation for those with similar values to participate whereas the threat of harm would be a sufficient incentive for others. In reference to hazardous waste, those who live in the most threatened areas or know something about the potential hazard would have the strongest inducement to join (Perry et al. 1980). The group must publicize its cause and its existence to attract that participation.

Social movement organizations are more likely to grow during periods of general social protest and when professional organizers or existing collective action groups are available. An important element with radioactive waste seems to be the existence of state and national environmental groups. These groups serve as models for new emergent groups. In terms of some organizational theorists, the new organizations enlist the help of other members of their "action set" to begin the development of an organizational "network" (Aldrich 1979). The emergent groups rely on larger organizations with similar causes, similar "opponents" (e.g., federal agencies), and records of success to borrow structure, tactics, and definition of the controversy (Meyer and Rowan 1977; Aldrich 1979; Walsh 1981; Williams and Payne 1985). The national organizations are also important in providing basic educational material on radioactive waste management (Williams and Payne 1985).

Thus, new organizations receive not only ideas for organizational structure and tactics from these national extralocal organizations but also resources such as information about hazardous wastes, familiarity with the language used to discuss their technological hazard, and other services. Perhaps most importantly, they establish a communications network with these similar organizations through which they can gain advice as the situation changes (Moe 1980; Martin and Wilkinson 1984). Such extralocal ties have been found to be important in acquiring community funding from federal agencies (Martin and Wilkinson 1984). Resource mobilization and organizational theorists have both found that organizations with little power, i.e., few internal resources, must ask other organizations to help supply for those resources (Aldrich and Pfeffer 1976; Peterson and Markle

1981). Gladwin (1980) found that environmental opponents are more likely to be of local origin and integrated into larger rather than smaller coalitions. The establishment of coalitions thus contributes to the viability of these groups.

The focus on specific issues and values versus inclusive or broader ones is very important for group growth. Smelser (1963:301) has indicated that movements with more general, vague, or inclusive symbols have the following characteristics: (1) diversity of motivations and grievances among the participants, and (2) a period of very rapid growth and a period of equally rapid decline. This means that groups based on broader (inclusive) ideas or causes can recruit members easily for rapid growth of the organization. The diversity of motivations and grievances among the participants indicates how broad or inclusive the symbols are. The problem with this broad inclusive approach is the rapid decline experienced by the movement after the rapid growth. Presumably, groups with more specific goals would grow more slowly but would not decline rapidly unless the goals of the group had been met or the source of conflict had disappeared.

Size of the group may not be the important variable, however, in terms of influencing decision-making. Size of the group could be important under conditions when representativeness (of the general area population) is important as is the case with public participation programs. Size can also be important in influencing elected officials and attracting the attention of the mass media. Where cases involve legal action or threat of legal action, size of the group is probably not a key variable. Variables more important than size could be: (1) legitimacy in the eyes of decision-makers and the public, (2) connections or affiliations with state and national groups, (3) effective organization among the members, and (4) resources (time, information, money) necessary to accomplish group goals.

4 SURVIVAL

Survival of a group is dependent on a number of variables. These variables, in general, can be put into two categories: those external to the group and those internal to the group. External variables relate to the group but are primarily determined outside of the group. Internal variables are variables that have to do with internal group dynamics. Generally, the variables that contribute to a group's emergence and growth are also responsible for its survival and decline.

Marx (1982:183) has listed general strategies for facilitating or inhibiting social movements. Facilitating strategies that represent external variables include: (1) making it possible for the energies of the movement to go toward pursuit of broader social change goals as well as maintenance needs, (2) creating a favorable public image and developing support ideology, (3) giving information to the movement, (4) helping supply money and facilities, and (5) encouraging external coalitions with potential allies and neutral relations (or conflict only in so far as it is functional with potential opponents).

Examples of facilitative internal variables are: (1) building and sustaining morale and encouraging internal solidarity, (2) building leaders, and (3) recruiting new members. Inhibiting strategies that represent external variables include: (1) directing the energies of the movement to defensive needs and away from pursuit of broader social change goals, (2) creating an unfavorable public image,

(3) withholding information, (4) inhibiting the supply of money and facilities, (5) encouraging external conflict with potential allies and opponents, (6) damaging morale, (7) encouraging members to leave, (8) displacing leaders, and (9) encouraging internal conflict.

Although numerous attempts have been made in the past to inhibit the activity of certain groups, public exposure to the tactics has generally been very damaging to the sponsor of such tactics. To the extent that a wide range of interest groups have been included in public participation/interaction programs, project sponsors have been facilitating the growth and survival of interest groups. With regard to controversial projects such as radioactive waste projects, facilitating interest group growth and survival has a distinct advantage in that organized groups are easier to deal with than diffuse opposition (Simmel 1955). As indicated in a previous study by the authors (Payne and Williams 1985), having groups organized is advantageous in that the groups identify points of contention, prioritize conflict issues, and provide an organization with which project sponsors can interact, resolve issues, and make compromises.

5 THE PARADOX

Understanding the conditions that bring about the emergence, growth, and survival of a group can help agencies and project sponsors deal with a group more effectively. Also, understanding where the group is in the emergence-growth-survival-decline cycle can provide insight into the group. By and large, the broader forces that shape public attitudes, ideology, and actions associated with group formation are outside the control of particular agencies or project sponsors trying to site a waste facility. Examples of such forces are: the existence of national, state, and local groups; prexisting concerns/fears over waste disposal issues; endorsement of values centered on conservation/preservation; and concern for the health and safety of one's family.

The demands of a democratic society are such that concerned citizens and organized interest groups have been increasingly included in the planning and decision-making process, usually through public participation programs. Whereas such interaction is increasing, there is some indication that recent public participation successes may be in conflict with the collective good of society because the "not in my backyard" (NIMBY) approach has effectively clashed with the need for safe disposal of hazardous waste (Bord, undated). There are also potential conflicts between local emergent group interests and national environmental group interests in the siting of radioactive waste (Williams and Payne 1985).

Agencies and project sponsors are caught to some extent in a cruel paradox. Involving the public (and organized opposition) in a public participation program means to "fan the flames" of the NIMBY syndrome and to contribute to the growth and survival of the very groups that "cause them trouble". Not involving the public and organized groups in the decision-making process further reduces sponsor credibility and represents an insult to the idea of participatory democracy.

One cannot hope for a resolution to this paradox until hazardous waste disposal is interpreted as a collective societal problem that exists at a national level. Not until the problem is viewed as a

national problem that is integrated into a national system of production will individuals and groups be forced to make difficult societal choices about the future.

Visions of the future and values regarding economic development, equity, conservation, lifestyles, etc., will all be brought into question in answering the difficult question of hazardous waste disposal. In the meantime, it is reasonable that groups emerge and argue that waste not be disposed in their backyard. Under this condition, agencies and project sponsors are obliged (by values of participatory democracy or, in some cases, law) to include such groups in the planning and decision-making process. It is best that such groups be included in the process by the agencies and project sponsors as early as possible. In addition, agencies and project sponsors would be well advised to act instead of react with such groups. In this way, the situation can be more easily directed toward mutually beneficial ends.

6 SUMMARY

This paper has outlined the two components of the facilitative setting that are important for group formation. The first component, the ideological component, provides the basic ideas that are adopted by the emerging group. The ideological setting for group formation is produced by such things as antinuclear news coverage and concentration of news stories on hazardous waste problems, on ideas concerning the credibility of the federal government, and on the pervasiveness of ideas about general environmental problems.

The organizational component of the facilitative setting provides such things as leadership ability, flexible time, resources, and experience. These are important for providing people, organization, and money to achieve group goals.

Growth of a group is dependent on how inclusive the symbols for the organization are. More broadly based groups probably can be expected to experience more rapid growth and decline. Narrowly focused groups can hope to attract a smaller number of devoted followers. Most groups can generally become more effective through coalitions and the establishment of networks.

There are a number of things that can facilitate or inhibit group survival. Generally, anything that adds to the credibility, legitimacy, and cohesion of the group is conducive to group survival. Inhibitors to group survival are discussed, but it is not recommended that one deliberately inhibit the development of interest groups.

By and large, the conditions conducive to group formation, growth. and survival are outside the control of decision-makers. Agencies and project sponsors are currently caught in a paradox. Actively involving the public in the decision-making process tends to increase the NIMBY syndrome and contribute to the growth and survival of various interest groups. Not involving the public means damage to credibility and conflict with values concerning participatory democracy. Resolution in this area can only be achieved when a comprehensive, coordinated national approach to hazardous waste management emerges. By being proactive instead of reactive and by better understanding how such groups emerge, grow, and survive, it is hoped that decision-makers can better deal with such groups in the future.

7 ACKNOWLEDGMENT

Work supported by the U.S. Department of Energy, Formerly Utilized Sites Remedial Action Program and Surplus Facilities Management Program, under Contract W-31-109-Eng-38.

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