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The Impact of Public Relations on Supporters of Nebraska's Controversial Low-Level Radioactive Waste Facility

A Thesis

Presented to the

Department of Communication

and the

Faculty of the Graduate College

University of Nebraska

In Partial Fulfillment

of the Requirements for the Degree

of Master of Arts

University of Nebraska at Omaha

by

Kelly L. Kimberly

July, 1990

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THESIS ACCEPTANCE

Acceptance for the faculty of the Graduate College, University of Nebraska at Omaha, in partial fulfillment of the requirements for a Master of Arts in Communication degree, University of Nebraska at Omaha.

Committee

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THESIS ABSTRACT

Nebraska's low-level radioactive waste facility has been a controversial issue. In spite of the controversy, and reports of threats and intimidation techniques used against supporters, there is a group of citizens in the host county, Boyd County, who continue to support the facility.

The purpose of this study is to determine (1) what activities or tactics supporters and communicators perceive have been used by people opposed to the facility to prevent the facility from being built, (2) what public relations techniques communicators not opposed to the facility have used, and whether these techniques have been used successfully in other controversial situations, (3) which public relations techniques supporters are aware of and which they view most favorably, and (4) how supporters and communicators feel these public relations techniques help offset the techniques supporters and communicators perceive have been used by people opposed to the facility.

The four steps used to gather data were face-to-face interviews with key communicators who are not opposed to the project, telephone interviews with supporters in Boyd County, completion by supporters of the Marwell & Schmitt compliance-gaining table, and a content analysis of materials in two of the most widely-read newspapers in Boyd County.

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I. INTRODUCTION

A. Statement of the Problem

Low-level Radioactive Waste Defined

Americans utilize nuclear technology for a varicty of purposes. Nuclear energy, medical technology, and agriculture-related research are just a few of the areas in which nuclear technology plays a role (Russ, p. 6, 1986). Over the years, the use of nuclear technology has grown steadily, and a byproduct of this is radioactive waste.

Radioactive waste can vary from highly radioactive items such as spent fuel rods from nuclear power plants to less radioactive items such as a beaker which once contained a radioactive substance used in a research lab. All of these items must be handled and stored differently when they are discarded. Therefore, the federal government developed five categories in which to classify these materials, based on origin, content of radioactivity, and hazard (Council on Scientific Affairs, 1989). The five categories are: (a) spent fuel from reactors, (b) high-level waste, (c) transuranic waste, for which the atomic number is higher than that of uranium, (d) uranium and thorium, byproducts of mining such as mill tailings, and (e) low-level radioactive waste.

Low-level radioactive waste is the topic of this study, and therefore it must be defined. According to Public Law 99-240

(1986), low-level radioactive waste is not defined by what it is, but by what it is not.

Low-level radioactive waste content varies, but "is primarily material which became radioactive by coming into contact with radioactive elements. The waste includes gloves, clothing, glassware, rags, power plant water purification filters, piping, and other materials (US Ecology, 1988).

History

In 1980, a policy was developed by Congress assigning states the responsibility of disposing of the low-level radioactive waste they create by January 1, 1993 (Dvorchak, 1989). The three facilities that had been storing waste for the country--located in Beatty, Nevada; Richland, Washington, and Barnwell, South Carolina--were concerned about the poorly packaged containers they were receiving from across the country and about transportation accidents, and basically did not wish to continue being responsible for the nation's waste (Dvorchak, 1989).

According to a letter to Nebraskans from Governor Kay Orr (1988), since the law passed and was reinforced by amendments in 1985, many states formed compacts with other states for disposing of the materials. These compacts are enacted by legislatures and signed by governors, and carry the authority of state law. Nebraska joined the Central Interstate Low-Level Radioactive Waste Compact in May, 1983, with Arkansas, Kansas, Louisiana, and Oklahoma. Legislation was passed 44-0 by the Nebraska

Legislature and signed by then Governor Robert Kerrey, formalizing Nebraska's participation.

The Central Interstate Compact formed a compact commission in 1983 (US Ecology, Site identification process, 1989, p. 1-1). The compact selected US Ecology as the project developer, and US Ecology then set out to study the five states and determine which was most suitable for location of the low-level radioactive waste facility. The California-based company also manages two of the nation's three current waste disposal facilities, including the oldest facility in Beatty, Nevada (US Ecology, 1988).

Nebraska was selected in 1987 to host the site based on comparative analyses of three factors: the volume and types of waste produced by each state, geologic suitability of the state for waste disposal management, and transportation distances from major centers of waste generation in the Compact region (US Ecology, Site identification process, 1989, p. 1-1).

Nebraska Governor Kay Orr imposed 10 conditions on the agreement that Nebraska would serve as host state. The conditions, under the categories of Community Options, Public Health and Safety, and Economic Compensation and Reimbursement were (Orr, 1988):

"Community Options

"1. Assurances that US Ecology and the Compact Commission will not locate a facility in a community without consent."

The issue of community consent has resulted in disagreement.

For example, in her testimony to the Nebraska Legislature asking for a local vote on accepting the facility, Lynn Moorer said, "Now is the time for Governor Orr to tell us that if a local vote doesn't appropriately define community consent, what does?" (Share, 1989). Governor Orr's adviser on the low-level radioactive waste issue, Norm Thorson, said in the same news article that community consent is an "elastic concept" that can be negotiated with local citizens.

A written discussion on the issue of community consent appears in Legislative Bill 1092 (1988).

> It is the intent of the Legislature that potential host communities be actively and voluntarily involved in the siting process. To the extent possible, consistent with the highest level of protection for the health and safety of the citizens of the state and protection of the environment, the developer shall make every effort to locate the facility where community support is evident.

"2. US Ecology must agree to defray the reasonable costs incurred by a local monitoring committee.

<u>"Public Health and Safety</u>

"1. Nebraska must have complete control over the facility design, the location of Compact offices, and a veto over the import or export of low-level radioactive waste into or out of the region.

"2. Nebraska must have the right to refuse decommissioning

waste." (Orr, 1987)

Decommissioning (Edelson, 1988) is defined as "the process of closing down and putting into a safe state a nuclear reactor after its useful life has come to an end."

The remainder of Governor Orr's 10 conditions are:

"3. Class 'C' waste must be stored in an easily retrievable form for 30 years, preserving an option to transfer it to a higher-level repository if the material is reclassified."

Low-level waste is ranked as Class A, B, or C depending on the concentration of radionuclides (Russ, 1986), especially the ones with longer half-lives. Class C waste has the highest concentration of long-lived radionuclides.

"4. Mixed waste (both radioactive and hazardous) must be treated to the maximum extent before shipment to the facility.

<u>"Economic Compensation and Reimbursement</u>

"1. Guaranteed compensation at acceptable levels to the State and to the host community, paid annually during the operating life of the facility.

"2. Complete reimbursement of all costs incurred by the State in regulating, licensing, and planning the facility.

"3. Guaranteed compensation at acceptable levels to local communities who become active participants in the site selection process. Preoperational compensation would be the obligation of the other four states.

"4. A guarantee of property values in the area surrounding the

site."

Legislative Bill 1092 (1988) also addressed each of the economic conditions imposed by Governor Orr. In 1990, the compensation level to the host community was raised from $1 million annually for the operational life of the facility to $2 million per year annually, adjusted for inflation (LB 761, 1989).

After Governor Orr imposed these conditions, US Ecology began studying Nebraska to find a suitable location for the facility. Candidate sites were identified based on the following criteria (US Ecology, Site identification process, 1989, pp. 3-2 & 3-3):

- Would protect public health and safety.
- Would provide a geotechnically and environmentally suitable site.
- Could be licensed and permitted in a timely manner after detailed site characterization in 1989.
- Would be located in an area that initially had expressed interest in participating in the screening process.
- Would adhere to Congressionally-mandated requirements and deadlines to provide a sound solution to the disposal of low-level radioactive waste.

The first step was to identify suitable geographic areas, based on criteria such as groundwater, geology, surface water, land use, population and urban growth, cultural and biological resources, and community capability within the state, and then to obtain formal expressions of interest from counties and cities

that wished to participate in the screening process (US Ecology, Site identification process, 1989, pp. 3-5 - 3-7).

US Ecology mailed an information packet to city and county officials in June, 1988, inviting them to formally request having their area studied as a potential host entity (US Ecology, Site identification process, 1989, pp. 6-6 & 6-7). Twenty counties expressed an interest and of these, potential host areas were identified in 17 (US Ecology, Site identification process, 1989, p. 8-2). Six of the counties withdrew their interest before screenings began, bringing the number to 11 counties that continued in the process until the studies were narrowed to three potential sites.

Nemaha, Nuckolls, and Boyd counties were selected as finalists in January, 1989. Throughout 1989, US Ecology conducted in-depth field studies at the three sites to identify the preferred site (US Ecology, Site identification process, 1989, p. 8-35).

Boyd County was named the preferred county on December 29, 1989. According to US Ecology Vice President Richard Paton, the following activities were to take place at the Boyd County site between January and June, 1990: continuing environmental monitoring, preparing facility layout, establishing operating procedures, outlining the site monitoring system, designating transportation routes, and writing emergency procedures (Cordes, 1989). Additional studies continue at the Boyd County site through July, 1990, when a license application is to be submitted

to the State of Nebraska. The site must be operational by January, 1993 (Cordes, 1989).

Statement of Purpose

After Nebraska was selected as the host state and as counties were invited to be considered as potential host communities, a great deal of local interest in the project began. This interest came both from people who considered the potential of hosting the facility an economic benefit to the community, and others who considered it a threat to public health and safety.

With this disagreement on the value of the site came controversy.

Individuals from organizations not opposed to the facility, and that have communicated on this issue (US Ecology, the Compact, Nebraska's two major waste generators, and the State of Nebraska) were interviewed and their comments qualitatively analyzed. Additionally, the same was done with key supporters from Boyd County. Comparisons also were made regarding communicators' and supporters' perspectives, and with public relations techniques used in this situation compared with other controversial situations. A content analysis of newspapers that are widely read in Boyd County was conducted and analyzed.

This study seeks to examine four key areas: (1) what activities or tactics supporters and communicators perceive have been used by people opposed to the facility to prevent the facility from being built, (2) what public relations techniques

communicators not opposed to the facility have used and whether these techniques have been used successfully in other controversial situations, (3) which public relations techniques supporters are aware of and which they view most favorably, and (4) how supporters and communicators feel these public relations techniques help offset the techniques supporters and communicators perceive have been used by people opposed to the facility.

This topic is one which has not been studied extensively, since there have been few low-level radioactive waste storage facilities developed and little opposition to those in place to date. This study offers guidelines for maintaining support in other issues where opposition and controversy are part of the program.

B. Review of Relevant Literature

Disapproval of Radioactivity

People tend to oppose something with the word radioactive or nuclear because of the perceived danger of risk of exposure, and this opposition appears to be getting more widespread. Over the years, many studies on approval and disapproval of nuclear issues have been done, especially for the nuclear power industry.

For example, studies show that when nuclear power was in its earlier stages, it tended to be looked on more favorably than it is today (Pokorny, cited in Nealey, 1990). Pokorny's surveys showed that while favorability has decreased, acceptability has increased. In other words, instead of supporting nuclear power, people tolerate it. The decline in favorability rating occurred at approximately the same time that the need for energy had decreased and shortly after the Three-Mile Island incident.

Another factor contributing to this negativity could be, according to some writers, that the news media tend to seek out and amplify controversy, especially on public safety questions (Nealey, 1990). Specifically, the news media have reported significantly more bad than good news on nuclear power (Nealey, Rankin, & Montano, 1978).

While many scientists believe that radioactivity is something to be respected and not feared, often they have difficulty communicating this. For example, they often point out that compared to many other activities in our daily lives

(smoking, driving a car), exposure to radioactive materials is a far less risky prospect (Otway, H., Maurer, D., & Thomas, K., 1978). However, the authors note that these observations assume rationality. People are ordinarily rational only when it is consistent with their subjective values. Given the same information, supporters and opponents will perceive it very differently based on their subjective values.

Surveys by Nealey, S. M., Melber, B. D., & Rankin, W. L. (cited in Nealey, 1990) have shown that attitudes toward nuclear power in general are more positive than toward building a nuclear plant in one's own area. The phenomenon of not wanting an industrial facility in one's own neighborhood is known as NIMBY--Not In My Backyard. The reasons for this are that neighbors are exposed to the greatest risk when hazardous facilities are operational, and because people are inclined to disapprove of allowing any kind of industrial facility near their homes, not just a nuclear power plant (Nealey, 1990).

Disapproval of the Nebraska Facility

While this author cannot demonstrate that Boyd County residents disapprove of nuclear technology in general, it is apparent through some of the news articles and statements from the opponents' publications that many Nebraskans disapprove of the low-level radioactive waste facility, and disapprove of it being located in Nebraska.

From the time Nebraska was selected as host state in 1987,

many Nebraskans used a variety of tactics to voice their disapproval of this decision, and in some cases, to attempt to change the decision.

Some of the tactics were designed to raise public awareness of the situation and gain publicity for the opponents. For example, Burma-Shave style signs, series of signs featuring rhymes posted along the roadside, were used in Nuckolls County (Superior Express, May 4, 1989). An example appearing in a photo in the Express featured the line, "Orr won't listen, Orr won't speak, Orr will sell us, up the creek. Dump the dump."

Another awareness technique was patterned after the Boston Tea Party (Nebraska City News-Press, March 6, 1989). Facility foes mailed tea bags to Govenor Orr, featuring the message, "No radiation without representation, we want to vote."

Some tactics used by people opposed to the facility are standard public relations techniques. For example, Concerned Citizens of Nemaha County publishes a newsletter called the Nemaha County Voice (1989). Several of the groups opposed to the facility have developed brochures (Williams & Eppley, 1989, Dump the Dump; Fisher, 1989, direct mail piece to citizens of Boyd County; Nuclear Waste Dump, Looking for a Home, 1989). These publications explain the groups' safety concerns, question the adequacy of existing laws on the issue, and invite people to meetings. Some of the opponents' publications also discuss motives and funding mechanisms of people who support the project.

Clay County was one of several where individuals spearheaded efforts to persuade the board of supervisors and the city council to rescind their invitations for further study by US Ecology (Clay County News, December 1, 1988, p. 1). Petition drives demonstrating that people did not want the facility in their community was a tool used to make the case to elected officials.

Nemaha County opponents "packed a Nemaha County courtroom" and spent 3 1/2 hours testifying in front of the county commissioners on why the county should not accept the $100,000 community improvements cash fund in 1989 (Hammel, 1989, p. 31).

In spite of an attorney general's opinion that they must do so, the Boyd County commissioners refused to appoint a representative to the local monitoring committee, a group of local people assigned the job of overseeing the work done at the site (Lincoln Star, February 28, 1989, p. 13).

Citizens hired lobbyists to represent their opposition to locating the facility in their counties (Butte Gazette, March 23, 1989, p. 1).

In 1988, Nebraskans for the Right to Vote was formed to "put the nuclear waste dump issue to a vote of the people." (Nuclear Waste is Our Responsibility, 1988). According to Lynn Moorer, vice chair of the Nebraskans for the Right to Vote, the initiative, which would have withdrawn Nebraska from the Central Interstate Low-Level Radioactive Waste Compact, and required voter approval before construction of a facility, was defeated two to one. Moorer's article attributes the defeat to "a

complicated ballot question and a flood of out-of-state money." (Moorer, 1988, p. 10)

Boycotts of businesses owned by people not opposed to the site were undertaken in many counties including Nemaha County (Hammel, May 6, 1989, p. 11). According to Nemaha County opponent Diane Durton, Concerned Citizens of Nemaha County voted to boycott businesses that were neutral or supportive of the facility to protest the county commissioners' vote to seek the $100,000 community improvements cash fund. Burton said that businesses that have not formed an opinion "are either brain dead or don't give a damn."

A dead cat found in the mailbox of a Webster County commissioner after the county had asked to be studied caused him to change his vote (Bartimus, 1989, pp. 1, 9).

US Ecology asked the State Patrol to protect owners of the land the company was studying after a landowner received threatening telephone calls (Thomas, January 19, 1989, pp. 1, 2).

The day a US Ecology office was set to open in Boyd County, local employee Bob Wittry found a dead skunk on the front step of his home (Thomas, April 4, 1989, p. 11).

Citizens' Clearinghouse was brought to Boyd County by Save Boyd County to discuss tactics for fighting the facility (Lincoln Star, March 26, 1990; Omaha World-Herald, March 24, 1990). Some of the tactics they described included discovering unfavorable information to use against supporters, shunning proponents, and harassing businessmen. Guest speaker Will Collette said later

that the group was describing techniques, not advocating them.

It is important to note that opponents have denied involvement in the harassment and threatening techniques mentioned here. It is possible that these techniques did not happen, or that specific individuals, rather than the group as a whole were responsible. However, if supporters believe that these techniques are being used, it can be intimidating from their perspective.

Persuasion in Controversial Situations

When people are opposed to something and believe it is advantageous to persuade others to their point of view, they might use a variety of persuasion techniques. In Persuasion by Karlins & Abelson (1970), the authors list a variety of categories in which persuasion techniques fall based on empirical research. Since this time, other studies have been conducted which support their general observations.

Here is a look at those persuasion categories that are most relevant. In addition to the Karlins and Abelson categories, some other pertinent and more recent studies are examined as well.

1. "In some circumstances, a mild fear appeal (threat) is more persuasive; in other cases a strong fear appeal is better." (p. 6)

Studies on fear appeal have been conducted since Janis and Feshbach's landmark study in 1953 (Janis & Feshbach, 1953). In

early studies, it was believed that high fear appeal correlates with high persuasion. However, as studies in the area continued, it was recognized that this is situational. For example, Natarjan (1979) found that threat appeals with a high certainty of occurrence show increasing persuasibility with increases in fear levels. Rogers (1975) developed the protection/motivation theory that list three criteria for when a fear appeal can be more successful--

"(1) Noxiousness or severity of threatened event," which is, in the eyes of the persuadee, the severity of the depicted event, "(2) probability of occurrence of the event," or the expectancy that the persuadee will be subjected to the event, and "(3) efficacy of a recommended coping response." This is the intensity of the belief that the desired response will work in making the fear appeal subside.

O'Keefe (1990, p. 166) finds that recent fear appeals research reaches two general conclusions. First, message material that is intended to induce a high level of anxiety may or may not do so. Boster & Mongeau (1984) reviewed fear appeal research and found that messages designed to induce fear simply were not effective in doing so.

O'Keefe's second rule regarding fear appeal is that when a message actually does induce more fear, it will enhance the effectiveness of the message.

Here are several other general considerations regarding persuasion that are applicable to this study (Karlins & Abelson,

1970).

2. "When the audience is generally friendly, or when your position is the only one that will be presented, or when you want immediate, though temporary opinion change, present one side of the argument. When the audience initially disagrees with you, or when it is probable that the audience will hear the other side from someone else, present both sides of the argument." (p. 22)

Jackson & Allen (1987) also explored when to use one-sided and two-sided messages. As a rule, two-sided messages are more effective than one-sided messages.

3. "Information by itself will almost never change attitudes." (p. 33)

4. "Sometimes emotional appeals are more effective, sometimes factual ones; it depends on the kind of message and the kind of audience." (p. 35)

5. "The person is rewarded for conforming to the standards of the group and punished for deviating from them." (p. 53)

6. "People who are most attached to a group are probably least influenced by communications which conflict with group norms." (p. 57)

7. "Opinions which people make known to others are harder to change than opinions which people hold privately." (p. 59)

8. "Audience participation (group discussion and decision-making) helps to overcome resistance." (p. 62)

9. "Opinion change is more persistent over time if the persuasive appeal is: (1) repeated and/or (2) requires active

(rather than passive) listener participation." (p. 78)

10. "The people you may want most in your audience are often the least likely to be there." (p. 84)

11. "The individual's personality traits affect his susceptibility to persuasion." (p. 97)

12. "There will be more opinion change in the desired direction if the communicator has high credibility than if he has low credibility." (p. 108)

Hovland and Weiss (1951) studied this issue and found that there is a strong correlation between these items. Lirtzman and Shuv-Ami (1986) recently studied the effectiveness of various messengers' warnings about product hazards. A somewhat unexpected result of this research is that people were less likely to trust the government than other organizations such as a product-testing laboratory.

Here are more of Karlins' and Abelson's (1970) pertinent observations.

13. "People are more persuaded by a communicator they perceive to be similar to themselves." (p. 128)

14. "Often the most 'sensational' forms of persuasion are among the least effective in producing long-term attitude change." (p. 134)

15. "Many scientists studying the persuasive process have devoted themselves to seeking and finding deterrents to behavior control." (p. 139)

An example of a deterrent is the inoculation theory, which

is discussed later in this section. Finding deterrents means recognizing that persuasion techniques will be or have been used, and preparing the persuadee for them in some fashion.

The 15 selected categories from Karlins' and Abelson's book point out a variety of categories in which persuasion techniques may fall. Given the problem statement, one could speculate that the people opposed to the low-level radioactive waste facility, as well as people not opposed to the facility and who communicate on the subject, might use a variety of these persuasion techniques, and that some work better than others on facility supporters due to their personal characteristics and beliefs.

A 1988 book (Cialdini, 1988) explores what causes a person to yield to the wishes of another. He states that everyone uses compliance techniques and is influenced by compliance techniques. Many of Cialdini's observations support those made by Karlins and Abelson in 1970. The focus of Cialdini's book is the techniques most commonly and effectively used by a diverse range of compliance practitioners (Cialdini, preface). He categorizes these influence techniques into six areas--(1) reciprocation, (2) commitment and consistency, (3) social proof, (4) liking, (5) authority, and (6) scarcity. Each of these also may be relevant as the techniques used by people involved with the low-level radioactive waste facility are examined.

Cialdini's first influence category is reciprocation (p. 21). This rule says that people believe that they should repay what another person has done for them--and are even obligated to

do so. This rule also says that if the person desiring the compliance does a small favor for the other person before he or she makes the request, he or she is more likely to get the desired compliance.

The second rule is commitment and consistency (p. 59). Once people have made up their minds and have taken a stand on an issue, they are far less likely to change that opinion. Research that has been done since the 1940s (Heider, 1946; Newcomb, 1953, and Festinger, 1957, cited in Cialdini, p. 61) has demonstrated that this need for consistency is a central motivator in behavior.

Social proof (p. 110) is the third rule of influence. People determine what is correct by observing what other people think is correct. As we see others behaving a certain way, we assume that behavior to be correct.

The fourth rule is liking (p. 157). This rule states that we most prefer to say yes to requests from people we know and like. Cialdini examines the many reasons that a person might like another person. One reason for liking is similarity. We like people who are similar to us (Byrne, 1971). We also like people who pay us compliments (p. 166). Additionally, we prefer people who are familiar to us or who possess familiar characteristics (p. 168).

A fifth rule is authority (p. 203). People have a deep-seated respect for authority and will do what an authority figure requests.

Cialdini's sixth rule is scarcity (p. 255). People assign more value to an opportunity when the opportunity is less available.

Compliance-gaining Strategies

Marwell & Schmitt (1967) developed 16 categories into which compliance-gaining techniques fall. The categories and their descriptions are outlined in Table 1 on pages 22-23.

Baglan, Lalumia, & Bayless (1986) used this list to administer a pencil-and-paper test during face-to-face interviews with representatives of environmental groups. A situation was described to the environmentalists in which they would want to persuade the other person/people to vote a certain way on an environmental ballot issue. They were to rate how likely they would be to use techniques that fit into each of the 16 categories. The study indicated that environmental groups appear to be more willing to use prosocial tactics than anti-social strategies in all categories.

Power Tactics

Saul Alinsky (1971) wrote Rules for Radicals: A Pragmatic Primer for Realistic Radicals to help "those who want to change the world from what it is to what they believe it should be." The book stresses negative tactics to get what is wanted. Alinsky is concerned with "how to create mass organizations and seize power and give it to the people."

Table 1

Compliance-gaining Strategies of Marwell & Schmitt

1.	Promise	If you comply, I will reward you.
2.	Threat	If you do not comply, I will punish you.
3.	Expertise, positive	If you comply, you will be rewarded because of the nature of things.
4.	Expertise, negative	If you do not comply, you will be punished because of the nature of things.
5.	Liking	Actor is friendly and helpful in order to get target in good frame of mind so that he will comply with request.
6.	Pregiving	Actor rewards target before requesting compliance.
7.	Aversive stimulation	Actor continuously punishes target, making cessation contingent on compliance.
8.	Debt	You owe me compliance because of past favors.
9.	Moral appeal	You are immoral if you do not comply.
10.	Self-feeling, positive	You will feel better about yourself if you comply.
11.	Self-feeling, negative	You will feel worse about yourself if you do not comply.
12.	Altercasting, positive	A person with good qualities would comply.
13.	Altercasting, negative	Only a person with bad qualities would not comply.
14.	Altruism	I need your compliance very badly, so do it for me.

Table 1
(continued)

15. Esteem, positive	People you value will think better of you if you comply.
16. Esteem, negative	People you value will think worse of you if you do not comply.

In the introductory chapters, Alinsky lists his personal ethics on whether or not "the end justifies the means" (Alinsky, 1971, pp. 24-47). His rules maintain that often the end does justify the means.

Alinsky also lists power tactics when fighting for or against a project. They are as follows:

"1. Power is not only what you have, but what you think you have."

"2. Never go outside the experience of your people."

"3. Whenever possible go outside the experience of your enemy."

"4. Make the enemy live up to their own book of rules."

"5. Ridicule is man's most potent weapon."

"6. A good tactic is one that your people enjoy."

"7. A tactic that drags on too long becomes a drag."

"8. Keep the pressure on."

"9. The threat is usually more terrifying than the thing itself."

"10. The major premise for tactics is the development of operations that will maintain a constant pressure upon the opposition."

"11. If you push a negative hard and deep enough it will break through into its counterside."

This rule is based on the premise that every positive has its negative. Alinsky cites Gandhi's development of passive resistance as an example of converting a negative into a positive.

"12. The price of a successful attack is a constructive alternative."

"13. Pick the target, freeze it, personalize it, and polarize it." (Alinsky, 1971)

Resistance to Persuasion, Compliance-gaining, and Power Tactics

Thus far, this thesis has examined some rules of persuasion, some categories of tactics that may be used in compliance-gaining, and some specific "power tactics" by a self-proclaimed radical. Persuasion, compliance-gaining, and power tactics all seek to make another individual do what the other desires, but the approach for each is different.

Persuasion is defined in O'Keefe by Simons (1976) as "human communication designed to influence others by modifying their beliefs, values, or attitudes." However, O'Keefe cautions that definitions are troublesome because in some cases they are too broad, and in other cases, too narrow.

Dillard (1988) defines compliance-gaining as "how one person attempts to effect behavior change in another."

Alinsky (1972) defines power tactics as: "those consciously deliberate acts by which human beings live with each other and deal with the world around them. In the world of give and take, tactics is the art of how to take and how to give. Here our concern is with the tactic of taking; how the have-nots can take power away from the haves."

Some specific theories also exist on using communication

techniques to help counter persuasion and compliance techniques. None could be identified specifically addressing resistance to power tactics.

One compliance-resistance theory is forewarning (Fikada, 1986; Janis & Terwilliger, 1962). According to these studies, if a person is forewarned that he or she may be subjected to fear-intended messages, he or she will resist being influenced by the communication.

The inoculation theory is particularly useful with regard to public relations, as it is a strategy all its own to help counter persuasion. The theory was first introduced by Miller & Burgoon (1973), who explained that its purpose was to promote resistance to changes in attitudes and behaviors. Inoculation is beating the opponent in outlining your position on a sensitive issue.

Public Relations Defined

Public relations has many definitions, depending on the resource used for the definition. A key public relations book used by the Public Relations Society of America, the field's professional organization, in its accreditation studies for members is Cutlip and Center's Effective Public Relations (1978). The first chapter deals with a wide variety of definitions of public relations from a wide variety of sources. An appropriate definition of public relations for the purpose of this study is from Public Relations News (in Cutlip & Center, 1978). "Public Relations is the management function which evaluates public

attitudes, identifies the policies and procedures of an individual or an organization with the public interest, and plans and executes a program of action to earn public understanding and acceptance."

The point of this definition is that public relations is not simply the communication aspects of the program, but it also must help to make policy decisions early on that will make a program acceptable to the key audiences.

Public Relations Programs on Controversial Issues

Little observational research exists on the effectiveness of public relations on controversial issues, and on public relations topics in general. Pavlik (1987) defines observational research methods as those data collection techniques that directly measure human behavior.

With regard to the lack of research in public relations on controversial issues, perhaps this is because in an actual controversial situation, it would be risky to use a control group without the benefit of public relations, when this could potentially harm the project being investigated.

Pavlik (1987) reviewed all research published in Public Relations Review since 1976, and found that only six studies used controlled observation in a laboratory experiment. He also stated that public relations researchers seldom employ even casual observation methods.

There are a number of journal and magazine articles

describing public relations techniques that are effective when there is opposition or controversy. Open communication seems to be the major theme in many of the case studies described on pages 28-35. Although "open communication" was not defined in these articles, it appears to mean being open, honest, and forthcoming with information about the project, and not just promotional.

One case discusses how a public relations program failed due to a lack of communication (Kaufman, 1988). The issue was the Challenger Shuttle Disaster, in which Rockwell International was the prime contractor. The author says the two greatest errors made were that there were major information vacuums created, and different operations within the company gave different stories; furthermore, Rockwell initially refused to consider itself responsible. Whether or not the company was responsible was not the issue. If the public felt that Rockwell was in some way responsible, the situation should have been handled more openly.

Sperber and Lerbinger (undated) remind public relations practitioners that part of the reaction to a facility such as a new factory in town depends on perceived costs and benefits. The benefits considerations might include jobs, additional purchasing power, a new tax source, local purchases, new buildings, and additional community resources.

Perceived costs could be such things as increased traffic, a need to expand community services (schools, roads, etc.), pollution, and unwanted types of residents (Sperber and Lerbinger, undated).

Sperber and Lerbinger's key recommendations are to offer reassurances to the community and include these components: an information center; being aware of and correcting misinformation; surveying for attitudes regularly; spiking the "rumor mill" with correct information; assigning a spokesman, and holding meetings with special groups that would have a particular interest in the outcome.

Another successful program that dealt with a controversial situation was the formation of Jacksonville People with Pride (RSW, 1987). A chemical plant in Jacksonville, Arkansas, was contaminated by dioxin. This hurt the community's image, and community leaders wanted to change this. A grassroots organization was formed, and the following activities conducted: a letter to all households, inviting residents to join; a fund raising letter, from which $10,000 was raised for group activities; news releases announcing the group; letters to the editor; an advertising campaign; a city beautification plan; Environmental Awareness Week in local schools; a conference on dioxin and its health effects; monthly steering committee meetings with People with Pride members; a city festival, and a brochure on the issue.

At the time the story on People with Pride was written, the group was in its formative stages. Early results included a successful fund raising campaign, 300 members in the group, and a credit in the local newspaper citing the group for turning around the community's image.

In the early 1980s, 3M Corporation discovered that one of its vendors had disposed of the 3M's industrial waste in an unacceptable fashion (3M, 1985). The company funded a two-year hydrological study of the site, and later volunteered to handle clean-up. Although the company was acting responsibly, the incident could have been perceived negatively because of concerns over lowered property values and air pollution as a result of the waste excavation.

The clean-up program was coordinated jointly by technical, legal, and public relations staff members.

The authors believed that open communication helped ease the fears of local residents. It is not known if their definition of open communication means that all information, both positive and negative, was presented. Public relations tactics included meetings with officials; sending carbon copies of all correspondence to interested parties; holding public information meetings; door-to-door distribution of a brochure; coordination of meetings with city officials; placement of documents in libraries; production of a newsletter, and sponsoring an information hotline.

Evaluation measured the bottom line results--there were no lawsuits filed against the project, and the company completed the clean-up project two years ahead of schedule. Additionally, 3M received congratulatory letters from the mayor, demonstrating city support of the company's handling of the problem.

A resource recovery plant wished to locate in Rahway, New

Jersey (Coleman & Pellet, 1986). This controversial energy source burns solid waste to produce electricity and steam. A group of local citizens opposed to the facility formed RAGE--Rahway Against a Garbage Environment. The authors decided to "meet NIMBY head-on." Their strategy was to present alternatives; point out the negatives about other energy sources; explain the benefits; invite community participation, and solicit third-party endorsements. The result of their program was approval of a referendum by 55 percent to 45 percent.

Another example is Eticam's (Cabot, 1987) predicament when the Rhode Island-based company that builds hazardous waste treatment facilities could not get permits for a planned hazardous waste project. After the permits had been blocked for two years, the company made the mistake of trying to align itself with an existing facility which already possessed the necessary permits. This only served to anger local officials. Additionally, one of the key officers had well-publicized legal problems. These issues made proper management of the public relations program more important.

Their plan included:

- Seeking third party endorsements, which were obtained when influential community groups were informed of the benefits of the proposed facilities. Also, tours of existing facilities gave the groups first-hand knowledge of what to expect.
- Education through the media was another key.

- Proper management of public hearings was accomplished through preparation of spokesmen before the meetings; presentation of a slide program, and preparation of handouts with information on company history, officers, the technology, safety, and project benefits.

The result was that the facility received the permits and siting agreements needed to proceed with the project. Additionally, the company received five positive endorsements from community groups, positive publicity and editorials, and community support at the hearings.

When a controversial topic arises, often the perception by opponents that they have no control over the situation is the key issue, according to Carol Gorney (1987). She recommends public-participation groups to prevent a problem or for early intervention if one is on the horizon. Although the value of these groups often is intangible, the author points out that no matter how good a project is technologically, economically, or legally, if it cannot be implemented due to public opposition, it is worthless.

Advocacy advertising is another technique that can be useful in this type of situation (Waltzer, 1988). According to Waltzer, polls indicated that in the mid-1960s, confidence in "big business" was as high as 50-60 percent. In 1974, it dropped to 30 percent due to Watergate, the recession, and the energy crisis.

Since this drop in confidence, many corporations have been

using advocacy advertising to help raise the level of confidence in their organizations. Waltzer suggests that this technique is useful to express views on controversial issues, to defend from criticism or attack, and to create a favorable attitude climate.

Media relations is another key variable to consider. According to C. M. Howard (1986), the strategy on environmental issues must include teamwork among the public relations, engineering, and legal departments. Howard stresses the importance of knowing about environmental legislation before the media arrives. The author's key recommendations were to bring public relations people in early, appoint a spokesman, and work together on a standby statement. A standby statement is not a news release, but a piece that spokesmen will use to answer reporters' questions. It features the basic facts and the organization's position on the issue.

Public Relations Programs on Nuclear Issues

As mentioned earlier, a great deal of research does exist citing people's opinions on nuclear power. Although there are many articles on handling controversy on nuclear issues, these primarily are observations on how situations were handled rather than empirical studies on what made the programs work.

When Cleveland Electric Illuminating Company began facing opposition to the Perry Nuclear Plant in 1986, a public relations program was implemented with the main objective of securing an operating license for Perry (1988). Tactics they employed

included: a phone campaign; attending all council meetings; open house tours of the plant; constant accessibility to the media; stockholder meetings; employee and resident newsletters, and testimonial advertising.

Polls showed that company efforts helped overcome disapproval of the facility.

A project that was undertaken by more than 200 utilities and nuclear reactor companies was the formation of a "truth squad" comprised of two engineers who refuted statements nationwide by anti-nuclear activists (Nickel, 1980). According to Nickel, the squad members helped to carry the message that nuclear plants have a better safety record, cause less environmental damage, and produce electricity more cheaply than oil or coal.

The rebuttals of this group to anti-nuclear publicity (such as a campaign by Jane Fonda and Tom Hayden) got equal time and space.

This truth squad was an adaptation of a program developed for Westinghouse in 1975 called "Campus America." Young Westinghouse engineers with whom college students could easily identify volunteered to debate nuclear power foes on college campuses across the nation (Nickel, 1980).

The author said that it is difficult to document the effectiveness of a broad-based program such as this. However, according to Gene Pokorny of Cambridge Reports, research firm specializing in nuclear opinions, the purpose of the program is to counter the erosion of support for nuclear power among former

backers who backed off after the Three Mile Island incident (Pokorny, date unknown, cited in Nickel, 1980).

The article topic that falls closest to that of low-level radioactive waste is a description of how to handle public relations on the transportation of radioactive waste (Pritchard, 1986). Northern States Power's public relations efforts before and during the transportation resulted in a well-planned program without incident, an award for the program's design, and a savings to the company of $25 million.

Some of the tactics the company used as they prepared to send nuclear waste through towns across the country were: "getting to the locals;" provision of information packets; a film of crash tests demonstrating the indestructibility of the transportation casks; making a point of not attending forums set up by opponents, and using analogies against the "what if" demands of opponents.

Summary of Literature Review

The literature reviewed explored a variety of areas that impact the topic of this thesis. First, the areas of disapproval of radioactivity in general and of the low-level radioactive waste site in Nebraska were reviewed. The issue of radioactivity is one that concerns many people (Nealey, 1990). Their concern is heightened if the facility will be located nearby (Nealey, 1990). A variety of reasons for opposition to the Nebraska facility were examined, according to materials disseminated by

opponents and news media accounts.

The literature review indicated that there is controversy on the issue because some people disapprove of Nebraska's facility and others approve. This disagreement may lead to the use of persuasion techniques, compliance-gaining strategies, and power tactics. A variety of articles in each of these areas is reviewed.

The topic of this thesis is the impact of public relations on project supporters. Therefore, public relations was defined and a variety of public relations activities that have been undertaken in other controversial situations explored.

II. METHOD

The purpose of this study is to identify (1) what activities or tactics supporters and communicators perceive have been used by people opposed to the facility to prevent the facility from being built, (2) what public relations techniques communicators not opposed to the facility have used, and whether these techniques have been used in other controversial situations, (3) which public relations techniques supporters are aware of and which they view most favorably, and (4) how supporters and communicators feel these public relations techniques help offset the techniques supporters perceive have been used by people opposed to the facility.

A four-step process was used to obtain relevant results on this issue. First, representatives from organizations that are not opposed to the site but that are communicators on the issue were interviewed. US Ecology, the Compact Commission, the State of Nebraska, the Nebraska Department of Environmental Control, Nebraska Public Power District, Omaha Public Power District, and People for Progress participated in personal face-to-face interviews with the author (Appendix A). A variety of questions regarding their public relations tactics, messages, and messengers were asked (Appendix B).

The Central Interstate Compact Commission was selected because the commission is the five-state consortium responsible for seeing that the facility is built, and for overseeing the

activities of US Ecology.

The Department of Environmental Control and the State of Nebraska will regulate the site and ensure that Nebraska's interests are considered.

Nebraska Public Power District and Omaha Public Power District are Nebraska's two major generators of low-level radioactive waste, and will be levied fees for waste disposal to fund the building and operation of the facility.

People for Progress is a group of Boyd County citizens that has been promoting the building of the facility in Boyd County.

US Ecology is the project developer. It has identified the preferred site, and is conducting geological studies, and ultimately is responsible for building the facility.

Second, 10 telephone interviews with 14 key supporters in Boyd County were conducted (Appendix C) to determine their opinions on the tactics used by opponents and how they feel about the various tactics, messages, and messengers used in the public relations program by key communicators on the other side of the issue (Appendix D).

When the spouse was involved in the issue, she was invited to participate as well as her husband.

One couple was selected because the husband is the mayor of Butte, the community closest to the site. Carl Weeder is chairman of the county commissioners. Two couples interviewed are steering committee members of People for Progress. Dr. Marcum is chairman of People for Progress, the group of Boyd

County residents formed to support building the facility in Boyd County, as well as chairman of the local monitoring committee, the group of Boyd County residents assigned the responsibility of overseeing activities at the Boyd County site. The remaining five interviews were with people recommended by the other supporters identified here.

All telephone and personal interviews were conducted over a two-week period in late June and early July, 1990.

Additionally, supporters were asked to fill out a questionnaire on opponents' tactics using the Marwell & Schmitt (1967) scale in the literature review. See Appendix E for the questionnaire.

Finally, a content analysis of news articles, advertisements, editorials, and letters to the editor was conducted on randomly selected materials from two widely-read newspapers in Boyd County. The procedures for this are described on pages 42-43.

A case study was selected as the method because case studies are appropriate when it is a how or why question, when it is a contemporary issue, and when the researcher has little control over the outcome (Yin, 1990).

Case studies typically include the study's questions, propositions, if any, the unit of analysis, a linking of the data to propositions, and criteria for interpreting the findings (Yin, 1990).

In this case, the study's purpose or questions are listed on

page 37. The propositions presented are that (1) people opposed to the facility may attempt to dissuade others from supporting the facility through persuasion, compliance-gaining techniques, and power tactics, and (2) there are public relations techniques that can be used successfully in controversial situations to maintain support of the project.

The units of analyses were Boyd County supporters, key communicators on the issue, and news articles from the Butte Gazette and the Omaha World-Herald.

A case study may be the most difficult type of research in which to ensure validity and reliability. Following Yin's (1990) guidelines, the following procedures were used. Evidence came from a variety of sources, including newspaper accounts, publications by support and opposition groups, and long interviews with various communicators and Boyd County supporters.

For internal validity, a number of analytical techniques were used, as recommended by Miles & Huberman (1984), including varied analyses of newspaper content and the frequency of positive and negative news coverage; a matrix of compliance-gaining tactics and whether or not these have been used. Also, data was linked in these ways: comparisons between supporters and communicator perceptions, comparisons between recommended public relations techniques in controversial situations and those employed in this situation, and observations regarding persuasion, compliance-gaining techniques, and power tactics in the literature review and whether supporters perceive that these

are used in this situation.

The case features external validity because the categories of public relations activities or tactics described in the various articles reviewed are fairly universal. Categorizing in this fashion allows generalizability.

Reliability is ensured because the author used Yin's (1990) recommended case study protocol and developed a case study data base. The case study protocol included these components (Yin, 1990): (1) project overview, including objectives and relevant readings, (2) field procedures, listing all sources of information, (3) questions, and (4) a guide to the report, including the outline, format, and bibliography information.

Additionally, the bibliography has a complete list of documents used for the study, including how to obtain obscure documents not available at the library.

The greatest challenge as well as opportunity the author faced was familiarity and involvement with this project as a public relations practitioner for Leslie Associates, a public relations consulting firm, and US Ecology is one of the author's clients. Awareness that this could bias the results was the first step toward ensuring that this does not occur. Additionally, since the focus was on supporters only instead of the population as a whole, cooperation was available from the subjects. Observations about opponent actions were gained through news media accounts, opponents' own publications, and accounts by supporters and the communicators listed in Appendix

A. It must not be assumed that all of the claims by supporters about the opponents are necessarily true, but if these claims are perceived as true by supporters, this is the important issue.

Newspaper Content Analysis

The Butte Gazette and the Omaha World-Herald are two of the most widely-read newspapers in Boyd County. The low-level radioactive waste facility has been covered extensively by both newspapers, through news stories, letters to the editor, and advertising (primarily in the Butte paper). A review of what the newspapers have covered in the past 17 months should help reveal what tactics, messages, and messengers have been used by opponents and supporters, as reported by the news media. During the period from January 1, 1989 through June 1, 1990, approximately 510 articles, letters to the editor, advertisements, and editorials on the low-level radioactive waste issue have appeared in the two newspapers--the Butte Gazette, a weekly publication (which has identical content but a different masthead for the Spencer Advocate) and the Omaha World-Herald, a daily statewide newspaper. The Butte paper published almost twice as much material as the Omaha World-Herald.

To create a sampling of articles and other content, a list of articles, letters to the editor, ads, and editorials was shuffled and every fifth item was pulled for analysis. Every fifth was selected because this was a manageable number that gave a good representation of the types of items being printed.

The unit of analysis for the newspaper content analysis was the whole item. Each item pulled (selected because it was the fifth, not taking into consideration its size or placement, or whether it was an ad, news article, letter to the editor or editorial) was read and categorized. Categories included which newspaper the item appeared in, what tactic was used as the focus of the item (article, rally, bus tour, letter to the editor, for example), message, messenger, and type of item.

The sample resulted in 68 articles from the Butte Gazette and 34 from the Omaha World-Herald.

III. RESULTS

a. Communicator Interviews

A 12-point questionnaire for communicators was designed specifically for this study. Interviews were administered individually to seven individuals and one couple who are responsible for communication policy decisions on this issue within their organizations.

Communicators were asked their organization's public relations goal for the low-level radioactive waste facility in Boyd County. Table 2 on page 45 lists the goals of individuals at each agency. Many of the organizations, Nebraska Public Power District, People for Progress, the State of Nebraska, and US Ecology, mentioned education on safety-related issues as a goal. Additionally, the Department of Environmental Control and the State of Nebraska wanted people to know that their role was to oversee the project and look out for the interests of Nebraskans. Public acceptance was mentioned specifically by the Compact Commission and US Ecology. Two groups that mentioned a goal not brought up by any of the other communicators were People for Progress, whose goal is to help communities work together, and Omaha Public Power District, whose goal on this issue is to "lay low" under instruction by their board of directors.

Question four asked the communicators' overall

Table 2

What is your agency's public relations goal for this project?

Communicator	Goal
Compact Commission Ray Peery	Help gain some public acceptance.
Department of Environmental Control Dennis Grams	Want public to realize that DEC's role is as regulators. They do not have a role in selecting or designing site.
Nebraska Public Power District Joe Flash	The industry's objective is identical to NPPD's...in order for waste issue to be dealt with, the public must be informed. Education is a goal.
Omaha Public Power District Hank Sterba	Under direction of the OPPD board of directors, role is to "lay low," only respond to inquiries.
People for Progress Ken and Lee Reiser	Help communities work together, involve people who are not involved so they understand what low-level radioactive waste is.
State of Nebraska Bud Cuca	Send the message: We create the waste and we are responsible. State's role is to protect public health and safety by doing all they can that is legally and humanly possible.
US Ecology Jim Neal	Heighten public awareness and understanding of the project to pave the way for public acceptance in the future. Prove to decision-makers that we are doing our work responsibly and informing people who wish to be informed. Publicize and support the technical information.
US Ecology Rich Paton	Provide a better understanding of real versus perceived risks of the project and provide an opportunity for constructive participation.

philosophy on handling public relations on the project.

Peery stated that being as open as possible in the process is important from the Compact Commission's standpoint, with the understanding that sometimes certain activities are not conducive to openness.

This conflicts, at least on the surface, with recommendations made on handling public relations on controversial issues as discussed in the literature review, and in other interviews. The concept of "open communication" was cited as important in many of these situations as well as by other communicators (3M, 1985, Neal, 1990). Whether these advocates of "open communication" also believe that some activities are not conducive to openness was not discussed.

Two key areas defined Grams' philosophy on the public relations program. First, the key is seeing the waste problem and how it can be dealt with. Grams is an advocate of offering tours of other low-level radioactive waste facilities. Second, Grams said that he believes that design and building of the facility must be done according to perception and not reality. If people feel that certain design considerations are important, these must be done whether they are necessary or not.

We must be able to identify with the concerns of the public, according to NPPD's Joe Flash. Recognize that these people's concerns vary, and technical people must be able to

communicate with the lay public on a non-technical level.

Hank Sterba stated that his philosophy is that public relations is a balancing act. The facts must be presented, but is it possible? There does not seem to be a middle ground on nuclear issues, only support or opposition.

People for Progress' philosophy, according to Ken Reiser, is to educate, and to get people to understand. Present the facts, and allow people to decide after they have all of the facts.

Bud Cuca said that it is difficult to have a philosophy, because some people opposed to the project pick a new issue a week to keep others on the defensive. He added that being a responsible watchdog for the people is part of his philosophy.

"Provide the answers to anyone's questions in an honest, responsible fashion and in a timely manner," is Jim Neal's philosophy. He also said that US Ecology's credibility as an information source is crucial, and that he strives to demonstrate that he is interested and open-minded. Neal's comments did not reflect Peery's statement that some activities are not conducive to openness. However, Neal was not asked specifically for his thoughts on this.

The public relations philosophy to which Rich Paton subscribes is openness, with the understanding that not all decisions are easy or popular. If a sound solution is going

to be developed, it will require a heavy emphasis on the technical merits of the program versus popularity.

Question five asked communicators to describe the main public relations activities or tactics that their organizations use. Communicators were invited to name as many tactics as they desired, but the list on Table 3 is not necessarily all-inclusive. Communicators were not asked if they used specific activities that they did not previously mention. The list of responses by organization is listed in Table 3 on page 49.

Most of the activities described appear to use mass communication techniques rather than interpersonal communication. For example, many groups mentioned news releases, newsletters, and advertising. Speaking engagements and visits with local citizens also were mentioned by the Compact Commission, Nebraska Public Power District, Omaha Public Power District, People for Progress, the State of Nebraska, and US Ecology. The concepts of open communication and of being accessible and available to answer questions were mentioned by the Department of Environmental Control, Nebraska Public Power District, the State of Nebraska, and US Ecology.

Question six asked each communicator to list his or her organization's key messenger(s) or spokesperson(s). Again, communicators could name more than one spokesperson if appropriate, and many did so. The key spoksepersons from

Table 3

What are the main public relations activities or tactics your organization uses?

Organization	Activities
Compact Commission Ray Peery	News releases, newsletter, fact sheets, speaking engagements, small group briefings, video.
Department of Environmental Control Dennis Grams	Tours of other facilities, being open and responding to requests.
Nebraska Public Power District Joe Flash	Making NPPD representatives available, speakers' bureau on low-level waste, science teacher workshop at Kearney State College, bill stuffer on waste.
Omaha Public Power District Hank Sterba	Distributing informational brochure,accepting speaking requests.
People for Progress Ken and Lee Reiser	Bus tours, media interviews, radio and newspaper ads, coffee program featuring prominent speakers.
State of Nebraska Bud Cuca	Concerted effort to communicate with opponents. Openly communicate with interested people.
US Ecology Jim Neal	One-on-ones with local people, local office and employee, media relations, news releases, newsletters, educational advertising, video, open communication with and responsiveness to interested people.
US Ecology Rich Paton	Public meetings, newsletters, workshops, statewide citizens advisory committee, videos, fliers, brochures.

each organization are identified in Table 4 on page 51.

Next, the communicators were asked to identify the main message(s) that the organizations used in Boyd County. The primary focus of the messages seemed to be on bringing about an understanding of which organization does what, and that safety is the primary consideration in siting this facility.

Ray Peery said that the Compact Commission, because its role is to be liaison with the five member states, has not tried to communicate messages in Boyd County. "It's not our job. We want people to understand who does what," Peery said. He added that the responsibility of working with the citizens of Boyd County lies with US Ecology and the State of Nebraska.

The main point the DEC wants to make is that the facility does not leak. The agency attempts to diffuse the incorrect messages--to educate people that the facility will not contaminate the groundwater.

Joe Flash said that NPPD's message is two-fold. First, that the public should not fear something until they understand it. If fear is called for, then the public can fear it. The second component of NPPD's key message is that before an organization makes a decision, it must weigh the benefits versus the risks. Flash said that there are three areas where potential restrictions could occur--in nuclear medicine, industry, and power generation.

Hank Sterba said that OPPD had three key messages.

Table 4

Who is/are the key messenger(s) from your organization?

Organization	Messengers
Compact Commission Ray Peery	Ray Peery
Department of Environmental Control Dennis Grams	Dennis Grams Jay Ringenberg Carla Felix
Nebraska Public Power District Joe Flash	Joe Flash Ron Bogus Wayne Jacobsen
Omaha Public Power District Hank Sterba	Hank Sterba Bill Neal
People for Progress Ken and Lee Reiser	Dr. J. C. Marcum Ken Reiser Bob Courtney Ron Schroetlin
State of Nebraska Bud Cuca	Governor Kay Orr Bud Cuca Dr. Norm Thorson Dennis Grams Jay Ringenberg Carla Felix
US Ecology Jim Neal Rich Paton	Rich Paton John DeOld Jim Neal

First and foremost, the facility will be built safely. Second, OPPD tries to stress the importance of nuclear power to its customers. Finally, OPPD supports the compact system.

Ken Reiser said that safety is the main message for People for Progress, the group that promotes the message that low-level waste will not hurt you if it is properly disposed of. The storage structure can and will be safe, and will feature above-grade cells with leak detection systems, according to Reiser.

The State of Nebraska's four key messages are: (1) disposal of low-level radioactive waste is federally-mandated, (2) we are acting responsibly, (3) this will protect public health and safety, and (4) there is a process which drives this, so let the process work.

US Ecology's key messages focus on safety and credibility, according to Jim Neal. The main point is that "low-level radioactive waste disposal is being and can continue to be conducted in a fashion that is safe for the public," according to Neal. Underlying messages are: US Ecology is qualified and experienced; US Ecology is made up of people, and those people do care; this process for selecting the site is credible, objective, and technically motivated; and US Ecology is willing to listen if people have something to say.

Rich Paton of US Ecology had a similar focus. He wants

people to know that the company is carrying out a national responsibility by effectively and safely dealing with waste material. Additionally, Paton said, "we're trying to do a job. It is a difficult job, and one that demands some reasonable solutions."

On question eight, communicators were asked if they were aware of any activities or tactics used by people opposed to the project to prevent the facility from being built in Nebraska. All communicators answered yes. They then were asked to describe some of the techniques. Most communicators felt that people opposed to the facility promote fear, use intimidation techniques, and spread misinformation to help prevent the facility from being built. The comments described by the communicators are their opinions and do not necessarily reflect the opinions of people opposed to the facility or others.

Additionally, Hank Sterba mentioned Nebraskans for the Right to Vote filed a complaint against OPPD and NPPD to prevent them from spending funds on public relations for the 402 campaign. Initiative 402 would have withdrawn Nebraska from The Central Interstate Low-Level Radioactive Waste Compact and provided a local vote before a community became host site for a low-level waste facility.

Ken Reiser mentioned some specific activities that he believed had occurred in Boyd County. One supporter's fence was cut in 42 places, and Reiser believes that this was done

by an opponent. Reiser said that petition drives also have been used, as have "frivolous lawsuits." The Reisers said that they had received crank telephone calls over the past year, and attributed these to people opposed to the facility.

Bud Cuca again referred to what he calls "the theme of the week," a new issue exposed on a regular basis to keep interest high and keep non-opponents on the defensive. He also said people opposed to the facility have applied political pressure by politicizing the issue.

Rich Paton also felt that opponents were politicizing the issue. "The opponents are using this issue as a demagogue," Paton said. Additional techniques he mentioned were physical and economic threats, shunning, embarrassing and name-calling.

Question nine asked the communicators to speculate on the motivation behind the opponents' activities. Many expressed concern about speculating on the motives because they were offering their opinions or did not have evidence of the motivating factors. Therefore, their opinions are listed here without identifying specific individuals. The author stresses that these responses are only speculation on the part of the communicators. Due to the comments' subjective nature, they should not be perceived as fact, but opinion by communicators.

One communicator used a phrase coined by Rush Limbaugh

and called the opposition leaders "ecoterrorists." He commented that one opposition leader already has gotten a job out of this, another is seeking to do so, and a third is involved strictly to enhance his ego.

Many of the communicators felt that the opposition leaders, both in Nebraska and from outside the area, are involved because their goal is to stop nuclear power production. The communicators believe opposition people feel that if there is not a place to store the waste, it cannot be produced. They also said that they believe that outside opposition people encourage the fears of local people and take advantage of them, recruiting them to help stop the project.

Many of the communicators felt that fear that the facility could not be built safely was a primary consideration for local people who opposed the project. The communicators said it was their opinion that local people do not want the facility in Boyd County because of the NIMBY syndrome--not in my backyard.

The exceptions to these speculations on local opposition were Ken and Lee Reiser, People for Progress members. They felt that local people had been polarized years earlier by another local issue, and the two sides in this issue, opponents and supporters, were on opposite sides in the school issue. "We must consider that we're fighting old rivalries, not just the facility," Ken Reiser said.

According to Ken Reiser, three years ago the communities of Butte and Spencer were competing for the student population of Naper, a community which had just lost its high school due to a low student population and Naper town leadership needed to decide where its students would go in the future. Reiser said that there had been animosity between Butte and Spencer for years (they had fought over the courthouse years earlier and Butte became the site) and this gave the two communities another reason to fight. As the two communities attempted to convince Naper to join them, Reiser said that Butte residents felt that Spencer residents became slanderous toward their community in an attempt to get the Naper students. Naper eventually elected to join the Spencer School District.

Reiser said that he thinks Spencer people now oppose the waste site in Butte because, based on the formula for division of funds as outlined in Legislative Bill 761, the Butte School District stands to gain the greatest share of the funds, and Spencer residents fear that this would allow the Butte School District to prosper when the Spencer School District might not. Based on the literature review, it does not seem that Mr. Reiser's opinion has appeared in any news accounts or in statements made by people opposed to the waste project.

Communicators were asked how their public relations programs helped counterbalance or offset the tactics used by

opponents, or if they actually did offset them. Most felt that their activities did help offset the negative tactics, although not overwhelmingly.

Ray Peery said that there is a core group of people who are in favor of the facility, People for Progress. They help counterbalance the opponents by giving the supporters a sense of community.

Dennis Grams said that the more the Department of Environmental Control participates in meetings, the more this counterbalances opposition. "Get them (Boyd County residents) the information and be responsive, and this counterbalances," Grams said.

Joe Flash said that while they cannot effectively counter the tactics, the best way is to provide factual information. "We take the high road, they take the low road," Flash said. He said that countering opposition information is difficult because of their tactics. Flash said that he believes that opponents use Rules for Radicals by Saul Alinsky as their handbook.

Note: People opposed to the low-level radioactive waste facility have not publicly stated that they use Alinsky's book. According to another source who asked not to be identified, the source attended a Citizens Clearinghouse meeting in May, 1990 in Boyd County sponsored by Save Boyd County, and this book was recommended reading.

Hank Sterba said OPPD's speaking appearances helped

counterbalance tactics used by people opposed to the facility when people were open-minded and interested in learning. This opinion also fits with Cialdini's (1988) influence category of commitment and consistency. Once people have taken a stand on an issue, they are less likely to change that opinion. If Boyd County residents have publicly stated that they are opposed to the facility, they probably would be less likely to listen to the messages of Omaha Public Power District.

Ken and Lee Reiser believed that their efforts through the news media helped explain their point of view to the silent majority by educating how the facility would be built and stressing economic benefits through People for Progress' slogan, "Lower Taxes, More Jobs, Better Schools." They felt economic messages helped counterbalance the messages regarding safety concerns.

Bud Cuca did not feel that his efforts could effectively counterbalance the opposition because "a local farmer engenders more sympathy than the governor's legal counsel."

Jim Neal said that providing and acknowledging local benefits is important in counterbalancing opposition. Additionally, demonstrating that US Ecology is trying to address local concerns and that the process is driven by local concerns helps counterbalance opposition.

Rich Paton had an observation similar to Ray Peery's.

He said that US Ecology attempts to provide an opportunity for people to see that they are not alone. "It shows the common person that there are highly qualified technical experts who agree with the course of action that is being taken; that sufficient safeguards are there for public health and safety," Paton said. This concept ties in to Cialdini's (1988) fifth rule of influence. According to this rule, "People have a deep-seated respect for authority and will do what an authority figure requests."

Comparing the communicators' counterbalancing techniques with techniques used by opponents, none of them appears to address opponents head on with debates, correcting misinformation or attempting to discredit opponents. Instead, communicators' techniques appear to rely on disseminating safety messages, discussing economic benefits, and letting supporters know that there are others who share their beliefs.

Question 11 asked communicators to name the most successful component(s) of the public relations program used by their organization to influence Boyd County residents. Their responses are listed on Table 5 on page 60.

Question 12 asked communicators what should come next--what they feel future strategies should be for their organizations' public relations programs. Communicators' opinions on what comes next are listed in Table 6 on page 61. All communicators said that some public relations

Table 5

What is the most successful component of the public relations program that has been used by your organization?

Organization	Component
Compact Commission Ray Peery	Information repositories Truth and openness
Department of Environmental Control Dennis Grams	Tour of Barnwell facility
NPPD Joe Flash	Educator workshops Power plant tours Brochure on nuclear power
OPPD Hank Sterba	Speaking engagements
People for Progress Ken and Lee Reiser	Bus tours to nuclear plants Bringing in outside speakers
State of Nebraska Bud Cuca	Meeting with locals privately
US Ecology Rich Paton Jim Neal	Good media relations Local employee, office Public meetings

Table 6

What do you think should be used as future strategies for your organization's public relations program?

Organization	Component
Compact Commission	Stress media relations Maintain support, keep supporters enthused Expose opposition tactics
Department of Environmental Control	More site tours, and film them for other Nebraskans to view Information fair in Boyd County where small groups can have questions addressed individually Seek public input and local involvement
NPPD	Communicate with elected officials and community leaders Avoid public meetings, forums for opponents
OPPD	Balance negative information with more positives on safety issues and design.
People for Progress	No longer need to promote facility, the choice has been made Conduct positive projects such as community betterment activities, use grants as asset for community Use statewide experts for education
State of Nebraska	Go back to the basics--convince people that nuclear power is not bad Put into perspective with other, more dangerous problems such as landfills, nitrates from cattle leaching into springs
US Ecology	Avoid complacency, continue providing information on activities Integrate company into community through communication, sponsorships, etc. Workshops on operation and design of facility, site tours

activities should be continued. The Compact Commission felt that it was important to keep supporters enthusiastic, and the People for Progress representatives said that they would like to move into a community improvement phase rather than facility promotion. US Ecology also said that this was a new phase, and that the company should try to integrate itself into the community. The Department of Environmental Control, OPPD, People for Progress, the State of Nebraska and US Ecology all mentioned that continuing educational efforts regarding site safety, radiation facts and progress at the site were important.

b. Supporter Interviews

The 12-point supporter interview questionnaire also was designed specifically for this study. Ten sets of Boyd County project supporter interviews were conducted with 14 persons. In four cases, a husband and wife both participated in the interview, and in the other six cases one person took part.

The same introductory questions were asked of the supporters as were asked of communicators--how long they had been involved and what caused them to become involved. Unlike communicators, all of whom who had been involved for a number of years through their jobs, supporters were relatively new in their involvement. All have been involved for 18 months to two years, the point when US Ecology invited counties to agree to further study for the facility.

Three reasons for supporters' involvement were mentioned most frequently: responsibility as an elected official/involved community citizen; after learning more, they believed it would be safe; and attraction of economic benefits as an asset to the community selected. Table 7 on page 64 categorizes supporters' responses to this question.

Additionally, Owen Johnson said that he became involved because he was asked by another supporter, and Wayne Kibby said that because we create the waste and it must be taken care of, it is our responsibility. Cindy Schroetlin said she became involved originally because of her husband's

Table 7

Why did you become involved? (supporters)

Supporter	Community Duty	Safety	Economic Benefits
Dale & Joyce Audiss	X		
Bob & Marvene Courtney	X	X	
Francis & Janie Fisher	X		X
Marvin & Alice Humpal		X	X
Owen Johnson	X	X	X
Wayne Kibby	X		X
Dr. J. C. Marcum			X
Ron & Cindy Schroetlin	X	X	X
John Tienken		X	X
Carl Weeder	X		

involvement. Carl Weeder, county commissioner and now a facility supporter, said that he originally voted against inviting US Ecology to study the county further because he did not believe the county could withstand the controversy on the heels of a heated school debate.

The third question asked, "This issue has been controversial over the past two years. What have been your reactions to the people opposing the project?"

Joyce and Dale Audiss said that the largest number of people opposed to the project have made up their minds they are opposed, and have not learned anything about the facility. Wayne Kibby and Dr. J. C. Marcum made similar observations. Carl Weeder expressed disappointment that people opposed to the facility have been unwilling to learn.

The Courtneys expressed surprise at the reactions, never expecting that people would be so opposed. They feel that people opposed to the project have carried it too far, not allowing others with different viewpoints to express their opinions.

Francis and Janie Fisher feel that everyone has the right to an opinion, but that they have been met with hostility.

Marvin Humpal's reaction has been to find the opponents, "amazing, amusing, and exasperating." As did most of the other supporters at some point in the interview, Humpal said that the key division on this issue is the

conflict over a school issue which was debated in Boyd County three years ago. According to Humpal, Butte and Lynch now have an adversarial relationship with Spencer and Naper because of a debate over school consolidation. This issue was discussed at length by Ken Reiser on pages 55 and 56.

Ron and Cindy Schroetlin's reaction to people opposed to the project was one of disgust. They, too, felt the school issue, as well as other town rivalries over the years, were behind the controversy. Ron Schroetlin said that opponents' safety concerns do not make sense. Butte is 2 1/2 miles from the proposed site, and Spencer and Naper are at least 10 miles away, yet he believes that the majority of Butte residents support the facility while Spencer and Naper oppose it.

Owen Johnson has the same opinion. "I don't think they're really against. They (Naper and Spencer) don't want Butte to prosper. There is lots of jealousy here," Johnson said.

In question four, Boyd County supporters were asked if they believed that any of the reasons that people have for opposing this project are valid, and if so, which ones. All said that safety concerns are valid, but that if people with safety concerns would listen to the facts their concerns would be answered.

Dale and Joyce Audiss mentioned the school issue at

this point. They said opponents fear that Butte will have a better school system because of the economic incentives, and that their fear might be correct.

John Tienken said that some people do not trust government, and that he understands that to an extent. However, he added that he, too believes that this is a school issue, not a waste issue. "They are putting fear in others who don't know anything. They are fighting so Butte won't benefit," Tienken said.

Question five asked supporters if they have been affected personally in any way by people with viewpoints opposing theirs, and if so, how. Many felt that they had not been affected personally by consequences as serious as others had experienced.

Several commented that they found out who their "true friends" were, and they had lost some friends because of their position on the waste issue. Many of the supporters said that opponents ostracize them because they are supporters.

An unidentified person threw rocks at Bob and Marvene Courtney at one of the county's Local Monitoring Committee meetings. A livestock trailer unhooked from their truck at the O'Neill, Nebraska sale barn. Additionally, they said they have been called names and have received threatening telephone calls from project opponents.

Francis Fisher said that he has lost business because

of his position on the issue. Ron Schroetlin said that he also has experienced boycotts of his gas station over the past two years. John Tienken said that he has been hurt financially because farmland he formerly rented was taken away because of his support of the waste facility.

Owen Johnson said that he was hit in the back of the neck by an opponent at a Local Monitoring Committee meeting, but that negative activities have subsided recently.

Dr. Marcum believes that people opposed to the facility follow Saul Alinsky's recommendations in Rules for Radicals. He said that his home was struck by gun shots early in the morning following a Local Monitoring Committee meeting. No one has been charged with the shooting.

Supporters were asked why they thought that people from Boyd County opposed the project. Almost every person interviewed brought up the school issue.

Fishers said that Boyd County people oppose the project because of misinformation. Dr. Marcum also felt that people opposed to the project are misinformed. Dr. Marcum, the only public supporter from Spencer, is the only person interviewed from Boyd County who did not mention the school issue. As mentioned earlier, many supporters believe that the division in support versus opposition for the waste facility is a Spencer and Naper versus Butte and Lynch issue. The other supporters interviewed are from Butte, Lynch, and Naper.

While the Schroetlins mentioned earlier that they believe this is primarily a school issue, they also believe that misinformation on safety issues contributes to the problem in gaining support. Ron Schroetlin said that local opponents have made statements about safety concerns so often that they are starting to believe them.

Carl Weeder said that Boyd County residents are against any change. He labeled those who stay in Boyd County instead of going away to college as high school-educated conservatives who do not like change. Comparing this with the persuasion literature, if Weeder's observations are correct, these people may be the ones on whom new information will be least successful. Karlins and Abelson (1970) observed that "the individual's personality traits affect his susceptibility to persuasion."

The second part of question six asked supporters why people from outside of Boyd County who are helping Boyd County residents opposed to the project oppose it. Most supporters felt that the outsiders' motivation was different than that of local residents. A number of them felt that outside people such as Lynn Moorer and Hugh Kaufman are anti-nuclear, and work with local residents to help further this cause. They said that South Dakotans who have recently become involved are simply misinformed.

Question seven asked supporters to list public relations activities that have been used by the developer,

the State, People for Progress, the Compact, or any other group not opposed to the facility. They were encouraged to name as many as they could recall. Public relations activities identified by local supporters are listed on pages 71 and 72 in Table 8. Many of the activities mentioned were those conducted by or that involved their group, People for Progress. For example, five mentioned the group People for Progress or citizens' committee in general, and seven mentioned the coffee program or speakers program. This observation fits with Cialdini's influence rule of liking (Cialdini, 1988). This rule states that we prefer to say yes to people who are like us. Furthermore, according to Cialdini, we prefer people who are familiar to us and possess similar characteristics. If these supporters all belong to or admire People for Progress members, they are more likely to agree with their beliefs and activities.

Question eight asked supporters which public relations activities conducted by any of these groups were most effective. The activities considered most effective by local supporters also are listed in Table 8, appearing in the righthand column.

Most supporters who mentioned bus tours to nuclear power plants said that opponents would not participate in their bus tours. Throughout the interviews, many supporters also said that while the public meetings were effective in the beginning, now they are not effective because people on

Table 8

What are some of the public relations activities on this issue you are aware of?

Which public relations activities conducted by any of these groups have been most effective?

Supporter	Activities Conducted	Most effective Activities
Audiss	People for Progress* (need more help from US Ecology and the state--Mrs. Audiss)	People for Progress
Courtney	Coffee speaker program	Radio, TV interviews
	Speaking to elected officials	Power plant tours
	Power plant tours	Help from Leslie Associates
	Community grants	
	People for Progress	
	Publicity, interviews	
Fisher	Direct mail	Public meetings
	Speakers	Power plant tours
	Community grants	
Humpal	Public meetings	Information meetings
	Small group meetings	Newspaper articles
	Videotapes	Brochures
	Radio and newspaper ads	
	Newspaper articles	
Johnson	US Ecology local office	Presentations by US Ecology and outside speakers
	Information repository	
	Local citizens group	
	Advertising	
	Listing supporters	

Table 8

(Continued)

Kibby	People for Progress Word-of-mouth education Publicity Meetings (Monitoring committee** is not working)	People for Progress Paton's presentation
Marcum	News releases Direct mail Advertising (People do not listen at public meetings)	People for Progress (but need to meet more often)
Schroetlin	People for Progress Advertising Tours of nuclear plants Small group meetings	Power plant tours Small group meetings
Tienken	Small group meetings	Small group meetings
Weeder	Information meetings Community improvement grants	Small group meetings

Key

*People for Progress is the group of Boyd County supporters that joined together to promote the facility and educate local citizens on the benefits.

**The local monitoring committee is a local committee set up by the Nebraska legislature to monitor US Ecology's siting activities.

the other side of the issue will not listen. This observation would support Karlins and Abelson's observation (1970) that the people you most want in your audience are the least likely to be there.

Next, supporters were asked which public relations activities conducted by any of these groups or individuals help them maintain their support in spite of the activities used by people opposed to the project.

Dale and Joyce Audiss said that the activities help them recognize that this project is the right thing to do. The economic messages help keep people committed in their support.

Bob and Marvene Courtney said that getting together with other supporters helps them feel that they are not alone. Bob Courtney said that when he first heard about the radioactive waste facility, he was against it, but listening to radio and television interviews made him decide there is another side of the issue, and that the facility can be built safely. He felt that the economic benefits of a new business, the grants, and the new jobs that will be created make their efforts worthwhile.

Francis and Janie Fisher said the people must have something to rally around. They stayed involved, and felt the opposition activities were offset because their involvement with other local supporters "helped show we're doing something, and that you're not an island," according

to Janie Fisher.

Marvin and Alice Humpal said the opponents' activities are offset because people "believe in what they're doing and don't get shook." They feel that if various supportive groups continue to carry their messages, eventually people on the other side will understand.

Owen Johnson said the friendliness and support by people like Meg Patterson of US Ecology help offset the negatives.

Wayne Kibby said that honest information from people such as the developer and the independent geologist helped people maintain their support. He added that there are many more people in favor of the project who are keeping quiet because they do not wish to get involved.

Dr. Marcum and John Tienken said that the support network of other people who favor the project was key in helping them maintain their support.

Correct information is the key to helping maintain support, according to Ron and Cindy Schroetlin. Carl Weeder said that he made up his mind that if studies show it will be safe, Boyd County should have the facility, and this is what has caused him to continue supporting the project.

Question 10 asked the supporters what messages they remembered hearing from the various groups that have been communicating on the issue such as the State, the Compact, and US Ecology--what key point did they think the groups

were trying to get across. Most of the supporters named very similar messages, and felt that these messages were coming from all of the groups involved. One message mentioned by every supporter was safety.

Dale and Joyce Audiss said that the key messages they recall are that the facility will not leak, moisture will not get to the waste, and the facility actually will be overbuilt.

Bob and Marvene Courtney said that a key message is that ground water and wetlands are not a problem. Also, the facility will be above-grade and the waste will be retrievable.

Francis and Janie Fisher said that the key messages they have heard are the facts and truth about the facility, and that economic benefits will come to the community because of it.

Marvin and Alice Humpal said that it will be built safely, and will not pollute the water. It will be built according to specifications, and will not be a trench. Monitoring systems will not allow problems.

Owen Johnson, Wayne Kibby, Dr. J. C. Marcum, and John Tienken said the key message is that the facility can be built safely.

Ron and Cindy Schroetlin said the key message is that we are responsible for the waste, and it can be handled safely.

Carl Weeder said that a key message he has heard from the local citizens committee is that they are against the tactics used by people opposed to the project. The key message is that this can be built safely, or it will not come to Boyd County.

Question 11 asked supporters to identify who the most credible person or people is/are who speak(s) on this issue. The same names came up frequently. Table 9 on page 77 lists the various messengers named by supporters. Larry Grimm's name was mentioned in six of the 10 interviews. Grimm is radiation safety officer at the University of Nebraska-Lincoln, and is not directly involved in siting the facility as are some of the other individuals mentioned. However, People for Progress in Boyd County has asked Grimm to address group members on two occasions. Additionally, an article appeared in the July 4, 1990 Omaha-World Herald (Anderson, p. 16) announcing the formation of an education group by Grimm. According to the story, the group is comprised of technical people from across the state who support the compact and who believe that low-level radioactive waste can be managed safely. The news story said that group members would be available to speak to organizations across the state on nuclear issues. The author's interviews with supporters took place the two days after the publication of the article, and many of the supporters interviewed mentioned this.

Table 9

Who is the most credible person who speaks on this issue?

Supporter	Most effective Messenger
Audiss	Rich Paton, US Ecology
Courtney	Larry Grimm, University of Nebraska-Lincoln John DeOld, US Ecology Rich Paton, US Ecology Jim Neal, US Ecology Jay Ringenberg, Department of Environmental Control
Fisher	Larry Grimm, University of Nebraska-Lincoln Rich Paton, US Ecology John DeOld, US Ecology
Humpal	Larry Grimm, University of Nebraska-Lincoln Rich Paton, US Ecology John Gallerini, Bechtel Paul Brown, Bechtel George Pierce, Independent Geologist
Johnson	Rich Paton, US Ecology Dr. Robert Fergason, University of Nebraska-Lincoln
Kibby	Ken Reiser, People for Progress Bob Courtney, People for Progress
Marcum	John DeOld, US Ecology Dennis Grams, Department of Environmental Control
Schroetlin	Larry Grimm, University of Nebraska-Lincoln Dennis Grams, Department of Environmental Control
Tienken	Gerry Allen, Civil Defense Harry Borchert, Department of Health Larry Grimm, University of Nebraska-Lincoln
Weeder	Larry Grimm, University of Nebraska-Lincoln

Another possible reason for supporters' opinion that Grimm is credible is that he is a person who has experience with radiation because of his job, but he is not directly related to the issue. Therefore, he might be perceived as more objective.

Rich Paton and John DeOld of US Ecology also were named by several supporters, but few of the remaining communicators were. This might be attributed to the role of each organization and individual in Boyd County. For example, Ray Peery stated in his interview that communicating to Boyd County residents was not the Compact's primary role. The utilities, Nebraska Public Power District and Omaha Public Power District, said that Boyd County is not in their service territory.

Finally, supporters were asked a concluding question similar to that asked communicators--what did they think should be the future strategies for the public relations program. For the most part, supporters wanted to be kept abreast of activities at the site now and in the future.

Dale Audiss said that Larry Grimm's new group is a positive step--getting technical people out speaking on the issue.

Joyce Audiss said that he believes Boyd County residents need to see more of US Ecology, the State and others responsible for the facility to take some of the pressure off local people. Dale Audiss disagreed with the

idea of public meetings because he felt they were counterproductive.

Bob and Marvene Courtney said that an independent engineer should be appointed to review facility construction on behalf of the monitoring committee. They said that the public needs to be shown what the license application is once it is submitted.

Francis and Janie Fisher said that People for Progress should do its best to keep people informed of what is happening and when. They also said that local input by local people on facility siting issues will be important to allow people to get involved and demonstrate their concern.

Marvin and Alice Humpal said continuing with news releases is important. They also would like People for Progress to spearhead some positive activities through which all Boyd County towns can work together. Marvin Humpal said that they cannot expect to win over the "hardcore 10 percent opposed," but perhaps they can work together with the others.

Owen Johnson said that more speakers are needed. Sponsoring a county fair booth again also would be positive. He mentioned that keeping people informed on licensing procedures is important.

Wayne Kibby said that the organizations involved should "continue the same things they've been doing."

Dr. Marcum believes Larry Grimm's statewide group

should be invited to Boyd County to speak. Additionally, he feels that the Department of Environmental Control's Information Fair, which will be held in summer, 1990 will be worthwhile.

Ron and Cindy Schroetlin said that repeating key points in communication is important. They felt that communicators should make an effort to keep people apprised of what is occurring at the site. A videotape of the Barnwell, South Carolina waste facility tour was televised in the county, and Ron Schroetlin said that this was very effective. He recommended that more of these types of presentations should be done. Television reaches the "fence-sitters" who would not attend meetings or actively seek information, Schroetlin said.

However, the Schroetlins said they are unsure if people's minds can be changed at this point. "Others are saying, 'I have corn to plant, hay to put up'," Ron Schroetlin said. Cindy Schroetlin added, "It's been over a year. It's tiring. We're trying to do a centennial. Boyd County is starting to get a bad name. We look like the Hatfields and the McCoys up here."

c. Compliance-gaining Questionnaire Results

During the telephone interviews with supporters, they were asked to complete a form which was mailed to them listing the 16 compliance-gaining strategies developed by

Marwell & Schmitt (1967). They were asked to anonymously indicate beside each strategy if they felt that people opposed to this project had used these strategies on them personally. They responded with "yes," "no," or "don't know."

Table 10 on page 82-84 lists the percentages of the 10 couples or individuals interviewed who felt that these techniques had been used on them personally. While every activity was named by at least one person, very few of the supporters said that every technique had been used on them personally.

Seventy percent of the supporters completing the questionnaire said that the threat had been used on them personally. Sixty percent said that expertise, negative had been used; 60 percent mentioned aversive stimulation; 70 percent mentioned moral appeal; 60 percent selected altercasting, positive; 70 percent mentioned altercasting, negative, and 70 percent mentioned esteem, negative. Five of the six categories in which more than half of the supporters believed that these strategies had been used on them personally were negative. Four of these negative categories, the threat, expertise, negative, aversive stimulation, and esteem, negative, carry a fear message.

Table 10

Compliance-gaining Strategies of Marwell & Schmitt

Supporters: Do you feel that any of the compliance-gaining strategies described here have been used by people opposed to the project on you personally? Mark any or all of the questions yes, no, or don't know.

	n	%	
1. Promise			If you comply, I will reward you.
Yes	1	10%	
No	9	90%	
Don't know	0	0	
2. Threat			If you do not comply, I will punish you.
Yes	7	70%	
No	3	30%	
Don't know	0	0	
3. Expertise, positive			If you comply, you will be rewarded because of the nature of things.
Yes	1	10%	
No	9	90%	
Don't know	0	0	
4. Expertise, negative			If you do not comply, you will be punished because of the nature of things.
Yes	6	60%	
No	4	40%	
Don't know	0	0	
5. Liking			Actor is friendly and helpful in order to get target in good frame of mind so that he will comply with request.
Yes	3	30%	
No	7	70%	
Don't know	0	0	
6. Pregiving			Actor rewards target before requesting compliance.
Yes	1	10%	
No	9	90%	
Don't know	0	0	

Table 10
(continued)

	n	%	
7. Aversive stimulation			Actor continuously punishes target, making cessation contingent on compliance.
Yes	6	60%	
No	3	30%	
Don't know	1	10%	
8. Debt			You owe me compliance because of past favors.
Yes	3	30%	
No	7	70%	
Don't know	0	0	
9. Moral appeal			You are immoral if you do not comply.
Yes	7	70%	
No	3	30%	
Don't know	0	0	
10. Self-feeling, positive			You will feel better about yourself if you comply.
Yes	3	30%	
No	7	70%	
Don't know	0	0	
11. Self-feeling, negative			You will feel worse about yourself if you do not comply.
Yes	5	50%	
No	5	50%	
Don't know	0	0	
12. Altercasting, positive			A person with good qualities would comply.
Yes	6	60%	
No	4	40%	
Don't know	0	0	
13. Altercasting, negative			Only a person with bad qualities would not comply.
Yes	7	70%	
No	2	20%	
Don't know	1	10%	

Table 10
(Continued)

	n	%	
14. Altruism			I need your compliance very badly, so do it for me.
Yes	2	20%	
No	8	80%	
Don't know	0	0	
15. Esteem, positive			People you value will think better of you if you comply.
Yes	5	50%	
No	5	50%	
Don't know	0	0	
16. Esteem, negative			People you value will think worse of you if you do not comply.
Yes	7	70%	
No	3	30%	
Don't know	0	0	

Key

n is the number of times the response was given by supporters

% is the percent of the 10 supporters who responded with that specific answer

Because these fear-related messages do not appear to work on supporters, one could speculate that Boster and Mongeau's (1984) literature review, stating that messages designed to induce fear are not effective, would hold true in this situation.

Another comparison that can be made with the literature review does not support another study. In Baglin, Lalumia, and Bayless' (1986) use of the Marwell and Schmitt questionnaire, they found that environmental group representatives would be less likely to use the anti-social tactics than the pro-social ones. This test indicated that, in supporters' opinions, the people opposed to the facility were more likely to use the anti-social tactics.

d. Communicator Versus Supporter Comparisons

On pages 86-87 in Table 11, a variety of successful public relations rules, strategies, and tactics for controversial situations as recommended by various organizations in the literature review are examined. How do these recommended activities compare with those key activities used on this project? Table 11 compares the recommended activities identified in the literature review with those being used in this situation, according to communicators, and which ones were mentioned as being used, according to local supporters. Information was drawn from communicator and supporter interviews, not only from the

Table 11

Activities recommended in literature compared with those mentioned by communicators and supporters as having been used

Activity recommended in literature	Mentioned by communicators	Mentioned by supporters
Offer, stress local benefits	X	X
Information center	X	X
Information repository	X	X
Information hotline	--	--
Assign, train spokesmen	X	--
Meetings with key groups	X	X
Public meetings	X	X
Avoid opponent forums	X	X
Local citizens group/ citizen endorsements	X	X
Direct mail	X	X
Proactive safety messages	X	X
Confront opponents/ correct misinformation	X	X
Tours of similar facilities	X	X
Slide show	--	--
Public participation groups	X	--
Phone campaign	--	--
Demonstrations on technical issues	X	X
Fund raising for supporters	--	--
Publicity, media relations	X	X
Letters to editor	--	X

Table 11
(continued)

Advocacy/educational advertising	X	X
Community relations (community improvements, event sponsorship, etc.)	X	X
Brochures, handouts	X	X
Involve legal/PR/technical in issues planning	X	--
Open communication	X	X

questions regarding specific activities but also if they mentioned an activity as being used at any point in the interviews. Activities mentioned at other points in the interviews were used because supporters and communicators were not pressed for an all-inclusive list when asked about activities used.

Nearly every recommended activity has been used by at least one communicator on this issue, and most of the supporters were aware of the various activities being used.

Communicators' perceptions of the most effective component of each organization's public relations program were examined earlier, as well as which components supporters considered most effective. Table 12 on page 89 compares these two observations. It is important to note that each communicator interviewed was asked only for the most effective components of the public relations program for his organization, and not which activities he considered effective in general.

e. Newspaper Content Analysis

Only newspaper materials were reviewed because broadcast materials were unavailable for analysis. However, the impact of radio and television information should not be discounted as a factor influencing people's decisions on this issue.

Appendices F, G, and H described later in this document

Table 12

Communicators: What is the most successful component of the public relations program that has been used by your organization?

Supporters: Which public relations activities conducted by any of these groups have been most effective?

Component	Effectiveness
Information repositories	C
Truth and openness	C
Tour of Barnwell facility	C
Educator workshops	C
Power plant tours	B
Brochure on nuclear power	C
Bus tours to nuclear plants	B
Meeting with locals privately	C
Good media relations	B
Local US Ecology employee, office	C
Public meetings, small group meetings, presentations	B
People for Progress	S
Help from Leslie Associates	S

Key
S--Mentioned as most successful by supporter(s)
C--Mentioned as most successful by communicator(s)
B--Mentioned as most successful by both supporter(s) and communicator(s)

appear as appendixes rather than tables due to their length.

The first content analysis of newspaper material (ads, articles, editorials, and letters to the editor) (Appendix F) lists the materials in chronological order, the tactic used, the key message or the gist of the article, and the name of the individual or organization ("messenger") to which the bulk of the story is attributed.

The second matrix (Appendix G) identifies the items by message and whether the item contains predominantly supportive, opposing, or both messages. These are further broken down as being locally originated (actions or comments made in Boyd County or a neighboring county) or having originated outside of the local area (primarily Lincoln, Omaha, or another state).

The third matrix (Appendix H) plots the tactics described in the item. Further determination is made whether the tactic is used by proponents or opponents, and once again where it was originated, locally or from outside the area.

The number of items (news stories, ads, editorials, letters to the editor) in the Boyd County newspapers is twice the number in the Omaha newspaper. This might be attributed to two factors. First, since the facility is to be built in Boyd County, it is of more local than statewide relevance. Second, the Boyd County weekly newspapers do not have a reporter; therefore, materials that are submitted are

likely to be used. The World-Herald covers stories with reporters assigned to various issues.

The next step in analyzing the newspaper materials was to determine how many news articles, letters to the editor, editorial or letter reprints, ads, and editorials ran in the Omaha World-Herald and the Butte Gazette. Table 13 on page 92 provides these comparisons. It is obvious from this table that the World-Herald's coverage of this event is primarily through news stories. In Boyd County, coverage is fairly equally divided among news stories, letters to the editor, and advertising.

Table 14 on pages 93-94 identifies key messages in the newspaper materials that have been brought out by supporters and opponents. Supporters are classified as those groups or individuals who support the building of the facility, including communicators who are not opposed to the project but who are not necessarily promoting the facility. For example, Dennis Grams of the Department of Environmental Control stated in his interview that the DEC's role is to oversee the licensing process. Grams said that while he is helping Nebraska fulfill its responsibility to dispose of radioactive waste, his job is not to advocate the project.

One observation that can be made after reviewing Table 14 is that although safety was considered the key message by many supporters, a number of peripheral issues are addressed in both supporting and opposing media materials.

Table 13

Type of Material by Newspaper

Item	World-Herald		Butte Gazette	
	a	b*	a	b*
News article	33	97.1%	21	30.9%
Letter to editor	0	0%	20	29.4%
Editorial or letter reprint	0	0%	11	16.2%
Advertisement	0	0%	16	23.5%
Editorial	1	2.9%	0	0%
	34	100%	68	100%

Column a is the number of times the type of material appeared, column b is the percent of the total sample. For example, 32 of the 34 items that appeared in the World-Herald were news articles, or 94.1 percent.

* Percentages are rounded.

Table 14

Key messages identified in media materials

Support Messages	Number of times message appeared
Nuclear power is best option	1
Opposition tactics criticized	9
Safety	7
Support growing	3
Celebrate choice of Boyd County	1
Local Monitoring Committee	3
Economic benefits	3
Video to be televised	1
Scholarship awarded	1
	29
Opposition messages	
Generally oppose	1
Stop work--wetlands	4
INEL problem exaggerated	1
Safety--general	4
Opposition is growing	5
Monitoring committee	6
US Ecology's record	6
Enlist others to fight	9
True Americans oppose facility	2
Liability	3
Ridicule/criticize supporters	8

Table 14
(Continued)

Recall election	6
Supporter vandalism of opponents	1
County voice is ignored	3
Nemaha committee sues	1
Thorson's appointment opposed	1
Oppose compact	2
Nightline to visit	1
Radio show	1
Save Boyd County speaker	1
US Ecology scholarship criticized	1
	67

Neutral/both quoted or represented

Supporters criticized	1
Dairy issue a concern/not concern	1
DEC and monitoring committee	2
Governor visits Lowell Fisher	1
Lowell Fisher resigns as SBC chair	1
	6

Many of these items are attacks or criticisms on people on the other side of the issue, which might support the supporters' claim that this is a rivalry issue more than a safety issue to opponents. It also is interesting to note that, although almost every supporter mentioned the school issue, not one newspaper item explored this issue.

Looking at the balance of coverage of supporter versus opponent viewpoints in these materials, the number of stories, letters to the editor, etc. originated by people opposed to the low-level radioactive waste facility far outweighs (67 messages) those from people who favor the facility (29 messages). Six items featured both supporters and opponents. All six of these appeared in World-Herald articles. A reporter had contacted both supporters and opponents for a comment or examined an issue from both perspectives. Table 15 on page 96 examines positive versus negative items appearing in the Omaha World-Herald and the Butte Gazette.

Next, all letters to the editor were pulled from the random sample of newspaper items. The number of positive versus negative letters to the editor that were written, and how many featured supporters versus opponents were examined. Of the 20 Butte Gazette letters to the editor in the sample, nine were written by supporters and 11 by opponents. Each side had two letters written by someone from outside of the area, but the remainder of letters were written by area

Table 15
Supportive versus Opposing Message Coverage
in the Butte Gazette Versus the Omaha World-Herald

Item	Newspaper/focus of story					
	OWH			BG/SA		
	Pro	Anti	Both	Pro	Anti	Both
Article	6	21	6	6	15	0
Letter to editor	0	0	0	9	11	0
Article or editorial reprint	0	0	0	7	4	0
Advertisement	0	0	0	5	11	0
Editorial	1	0	0	0	0	0
	7	21	6	27	41	0

Key

OWH--Omaha World-Herald

BG/SA--Butte Gazette/Spencer Advocate

Pro means individuals or organizations in favor of or not opposed to building the facility, and anti means individuals or organizations that are opposed to building the facility. Based on this sampling of letters, it appears that the number of supportive/opposed letters that ran over this 17 month period are close to equal. Although the World-Herald has a positive editorial position on this issue and has written several favorable editorials, (in addition to the ones included in this sample,) no letters to the editor appeared in this sample.

The bulk of the items appearing in the World-Herald were news articles, and most of those emphasized opposition messages. The type of materials (ads, letters to the editor, etc.) appearing in the Gazette varied, although more opposition items ran there as well.

While opponents appeared to run more ads than supporters, in the Boyd County newspapers, many of these were related to the May elections. In May, 1990, several people opposed to the facility ran for local office against people who supported the facility. Therefore, the number of ads placed by supporters might actually be greater if the campaign ads are not counted.

Who wrote, sponsored, or was quoted in these newspaper items? Seventeen items featuring primarily a local supporter appeared, and 24 supportive messages originated from outside the area.

Forty-six opposition items were originated locally, and 21 came from outside the area. The difference in the number of locally-originated versus outside-originated articles (a greater percentage of outside articles came from supporters) makes sense, because the individuals and organizations involved in building and regulating the facility are not from Boyd County. However, this does not explain why the number of messages featuring primarily opponents is more than double the number featuring supporters. It might indicate that there is more local opposition than support, or that people opposed to the project do a better job of making their views known than those who support it, or as Nealey observed in his analyses of media coverage on nuclear issues (1990), the media tend to cover more negative than positive stories.

IV. DISCUSSION AND RECOMMENDATIONS

Based on responses by communicators and supporters, many of the persuasion and compliance-gaining techniques and power tactics outlined in the literature review have been used by people opposed to the low-level radioactive waste facility. Most public relations techniques identified as successful in other situations also are being used in this situation. While supporters were aware of most public relations activities that had been undertaken by the communicators not opposed to the facility, their perceptions on which were most effective sometimes conflicted with those viewed as most effective by communicators. In the opinion of most supporters and communicators interviewed, public relations techniques do help to offset techniques they perceive are being used by opponents, although not by directly battling opponents on their statements.

While this study examined the impact of public relations from a supporter's perspective, the first step was examining the reasons why people oppose the project.

The literature on disapproval of radioactivity that was reviewed showed that approval ratings had decreased and that people are less likely to support building an industrial facility in their own neighborhoods. According to the literature review, the Nebraska facility has encountered a great deal of opposition, and many of the reasons people use for being opposed to the site are safety-related.

This is not supported by supporters' speculation that the waste issue is a town rivalry not related to safety. Additionally, items covered in the newspaper content analysis did not indicate that safety was the main issue covered.

As Cialdini's (1988) research showed, once people are committed to a decision, they are highly unlikely to change. And if their peers, people they respect, are on their side of the issue, they are unlikely to join forces with people from a rival community. The greatest rivalry appears to be between Butte and Spencer. While the bulk of a list of people who have publicly acknowledged their support for the facility are from Butte, only one couple, Dr. and Mrs. J. C. Marcum, are from Spencer. Supporters claim that nearly all Butte residents support the facility.

Recent fear appeals research discussed in the literature review indicated that messages designed to induce fear often are not effective in doing so. Supporters said that they did not believe the safety messages regarding the waste site, and therefore these messages were ineffective with supporters.

The interviews might indicate that the safety messages designed to create fear did not work. While opponents had messages that the facility would not be safe, supporters said that after listening to information from other sources that the site could be built safely. According to the

interviewees, the economic messages may be the ones that persuaded them to publicly support the facility.

One point supported by the literature review is Karlins' and Abelson's conclusion that the people you most want in your audience are least often there. Supporters say that while committed supporters and opponents have attended these meetings, other people who could still be influenced did not.

Conversely, Boster and Mongeau's research (1984) found that messages designed to produce anxiety might not. Fear messages used by opponents regarding the safety of the Boyd County site and the consequences supporters would suffer have not been effective in neutralizing them.

Three crucial messages were emphasized by supporters regarding their support. First, they were interested in the facility because they thought it would be good for the community in terms of its economic incentives. This supports Cialdini's (1988) influence category of reciprocation--people believe that they should repay what has been done for them.

A second key point by the supporters is that they were convinced early on that this facility could be built safely. Early meetings by US Ecology and the Department of Environmental Control convinced them that the project would be safe. For many of the supporters, the inoculation theory was at work (Miller & Burgoon, 1973). The organizations

"beat their opponent" in outlining their safety position.

The third point was that supporters felt a sense of duty and community and that they were not in this alone due to their support group, People for Progress. Having publicly committed, and having a group of people they respect with the same views, helped them confirm their own views, even in the face of opposition. This reinforces two of Karlins' and Abelson's observations (1970) on persuasion. First, that opinions which are made known to others are more difficult to change than opinions people hold privately, and second, that people who are attached to a group tend to be least influenced by communications which conflict with their their group norms.

This also fits with two of Cialdini's (1988) influence categories, commitment and consistency and social proof.

Cialdini's influence category of authority also seems to be effective with supporters. The most credible messenger named most often by supporters, Larry Grimm from the University of Nebraska-Lincoln, was somewhat removed from the issue. This could mean one of several things. As Cialdini (1988) pointed out, people have a deep-seated respect for credible authority figures and will do what such persons request. Another possibility is that a third party who is not involved is more credible. Or perhaps the other communicators involved need to do more to be accessible to supporters in the community, thus gaining

credibility through trust.

Supporters perceived that compliance-gaining strategies hade been used by opponents, particularly the negative strategies. If Save Boyd County is considered an environmental group, this opinion does not support the Baglin, Lalumia and Bayless findings that environmental groups would not be inclined to use the anti-social strategies. However, it must be stressed that these are supporters' opinions and not actual accounts of what strategies have been used.

As a whole, communicators and supporters did not identify specific power tactics used by opponents except "ridicule is man's most important weapon." Several individuals did mention one or more of the activities and several made a general claim that opponents followed Alinsky's Rules for Radicals.

Comparing the literature review regarding public relations techniques recommended in a controversial situation, it appears that all have been used in this issue. While the techniques appear to be working with supporters, this comparison does not determine if they are working with neutral critical people, and it is obvious through newspaper accounts that they are not working with opponents.

Supporters are aware of most public relations techniques used by communicators, but often named as most effective the ones associated with their group, People for

Progress. This supports Gorney's article on public participation and stresses the importance of local involvement in public relations endeavors.

While supporters and communicators felt that efforts worked to counterbalance opposition tactics, their reasons were not tied directly to opposition activities. Instead, they focused on parallel public relations programs with a strong educational component.

Another important observation is that the news media published far more negative aspects of the program than positive. The Omaha World-Herald covered the issue, and a reporter decided what aspects to cover. Since the Butte and Spencer papers seldom report on any issues, they must have received a greater number of negative items than positive.

Nealey (1978) said that reporting more on negative aspects than positive is common practice on a nuclear issue. What is not known is whether there is simply more negative news to be reported than positive, or if communicators and supporters could do a better job of telling their side of the story, or if the news media cover the negative stories because they believe that they are more newsworthy and exciting. This could be an interesting study in itself.

V. LIMITATIONS OF STUDY AND IMPLICATIONS FOR FUTURE RESEARCH

This issue provides countless opportunities for future research projects. As was pointed out in the methodology, the main limitation of this study is that it is explored exclusively from the supporters' and non-opposition communicators' perspective.

Additionally, as a case study, it is primarily an observation of what happened. Because the situation was observed and not controlled, it is difficult to tell what would have happened if public relations would have been managed differently. Future research might test the effectiveness of various communication and public relations techniques before they are used in those cases where there is minimal risk.

One of the most beneficial types of research that could be done is examining this solely from an opponents' perspective in Boyd County.

As other compact states progress in their siting, it would be interesting to compare and contrast different reactions in different compact regions, or perhaps among finalist counties being studied within a specific state.

If some opposition leaders truly have anti-nuclear goals and are advising local people to use negative and sometimes violent tactics that many supporters claimed they were, it would be interesting to take an inside look at

opponents' strategies. However, getting cooperation for publication of such a study would be extremely difficult if not impossible.

This study did not rely to a great extent on theory and standard communication models, which is a disadvantage. The focus was public relations activities in controversial situations and little research exists in this specific area. However, future projects could explore this issue from a more theoretical standpoint.

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Appendix A

Communicator Case Study Personal Interviews

US Ecology: Rich Paton, Vice President;
Jim Neal, Director of Public Assistance;

Compact Commission: Ray Peery, Executive Director;

State of Nebraska: Bud Cuca, legal counsel to Governor Kay Orr;

Department of Environmental Control: Dennis Grams, Director;

NPPD: Joe Flash, Director of Nuclear Information;

OPPD: Henry Sterba Director of Public Relations;

People for Progress: Ken Reiser, Vice Chairman.

Appendix B

Questionnaire for Communicators

1. How long have you been involved with this issue?
2. What caused you to get involved?
3. What is your organization's public relations goal for this project?
4. What is your overall philosophy on handling public relations on this project?
5. What are the main public relations activities or tactics that your organization uses?
6. Who is/are the key messenger(s) or spokesperson/people on this issue from your organization?
7. What is/are the main message(s) from your organization for the residents of Boyd County?
8. Are you aware of any activities or tactics used by people opposed to this project to prevent the facility from being built in Nebraska? If so, what are they?
9. What do you think is the opponents' motivation behind these activities?
10. How do your public relations programs counterbalance or offset the tactics used by people opposed to this project, or do they?

11. What is the most successful component of the public relations program that has been used by your organization to influence Boyd County residents?
12. What do you think should be used as future strategies for your organization's public relations program?

Appendix C

Local supporters telephone interviews

Local supportive elected officials: Ron and Cindy Schroetlin, Carl Weeder

Local public supporters: Francis and Janie Fischer, Dr. J. C. Marcum, Bob and Marvene Courtney

Local supporters interviewed recommended by the individuals above:

Wayne Kibby

John Tienken

Marvin and Alice Humpal

Owen Johnson

Dale and Joyce Audiss

Appendix D

Questionnaire for Local Supporters

1. How long have you been involved in this issue?
2. Why did you become involved?
3. This issue has been controversial over the past two years. What have been your reactions to the people opposing this project?
4. Do you feel that any of the reasons that people have for opposing this project are valid? Which ones?
5. Have you been affected personally in any way by people with viewpoints opposing yours? How?
6. Why do you think that some people from Boyd County oppose this project? Why do you think that people from outside of Boyd County who are helping Boyd County residents oppose this project oppose it?
7. What are some of the public relations activities on this issue that you are aware of that have been used by the developer, the State, People for Progress, or any other groups that are not opposed to the project?
8. Which public relations activities conducted by any of these groups do you feel have been most effective?
9. How do public relations programs from the groups or individuals not opposed to this project help you maintain support in spite of the activities used by people opposed to this project, or do they?

10. What key messages do you remember hearing from people who are not opposed to the project? (US Ecology, State, DEC, Compact, NPPD, OPPD, People for Progress?)
11. Who is the most credible person who speaks on this issue?
12. What do you think should be used as future strategies for the public relations activities for this project?

Appendix E

Compliance-gaining Strategies of Marwell & Schmitt

Supporters: Do you feel that any of the compliance-gaining strategies described here have been used by people opposed to the project on you personally? Mark any or all of the questions yes, no, or don't know.

1. Promise — If you comply, I will reward you.

___Yes
___No
___Don't know

2. Threat — If you do not comply, I will punish you.

___Yes
___No
___Don't know

3. Expertise, positive — If you comply, you will be rewarded because of the nature of things.

___Yes
___No
___Don't know

4. Expertise, negative — If you do not comply, you will be punished because of the nature of things.

___Yes
___No
___Don't know

5. Liking — Actor is friendly and helpful in order to get target in good frame of mind so that he will comply with request.

___Yes
___No
___Don't know

6. Pregiving — Actor rewards target before requesting compliance.

___Yes
___No
___Don't know

Appendix E
(continued)

7. Aversive stimulation — Actor continuously punishes target, making cessation contingent on compliance.

___Yes
___No
___Don't know

8. Debt — You owe me compliance because of past favors.

___Yes
___No
___Don't know

9. Moral appeal — You are immoral if you do not comply.

___Yes
___No
___Don't know

10. Self-feeling, positive — You will feel better about yourself if you comply.

___Yes
___No
___Don't know

11. Self-feeling, negative — You will feel worse about yourself if you do not comply.

___Yes
___No
___Don't know

12. Altercasting, positive — A person with good qualities would comply.

___Yes
___No
___Don't know

13. Altercasting, negative — Only a person with bad qualities would not comply.

___Yes
___No
___Don't know

Appendix E
(Continued)

14. Altruism

I need your compliance very badly, so do it for me.

___Yes
___No
___Don't know

15. Esteem, positive

People you value will think better of you if you comply.

___Yes
___No
___Don't know

16. Esteem, negative

People you value will think worse of you if you do not comply.

___Yes
___No
___Don't know

Appendix F

Randomly Selected Materials Summary

Date/ Newspaper	Tactic	Message	Messenger
1/5/89 Butte	Article reprint	Paul Harvey: nuclear power is preferable to other forms of energy.	People for Progress
1/17/89 Butte	Letter to Editor	Californian opposes site.	Ranold Kennedy, Auburn California
1/20/89 OWH	Leaflet & response	Leaflet: site poses danger to dairy facilities. Response: No known cases of contamination ever reported.	Opponents and Dr. J. C. Marcum
1/31/89 OWH	Letter to Governor	Drop Boyd County from consideration because it is near aquifer.	Lowell Fisher
2/2/89 Butte	Letter to Editor	No one able to substantiate claims of problems at INEL regarding waste.	Phil Anderson
2/9/89 Butte	Editorial reprint	Low-level radioactive waste debate marred by scare tactics and distortions.	Omaha World-Herald editorial
2/16/89 Butte	Ad	Myths associated with low-level radioactive waste issue.	Save Boyd County
2/16/89 Butte	Article	DEC setting up monitoring committees.	DEC
3/9/89 Butte	Editorial Reprint	Robert Apostol of Chadron Record: Need to support our neighbors who oppose low-level radioactive waste site.	Save Boyd County

Date/ Newspaper	Tactic	Message	Messenger
6/14/89 OWH	Recall	Opponents gathered enough signatures to force recall election of two Boyd commissioners.	Save Boyd County
6/14/89 Butte	Ad	Explanation of low-level radioactive waste.	US Ecology
6/20/89 OWH	Testimony	Plan to tell compact commission: local support for facility growing, despite harassment by opponents.	Butte Mayor
6/23/89 OWH	News article	Call to stop work on site, because monitoring committee is not properly functioning.	Lowell Fisher
7/6/89 Butte	Letter to Editor	Supporters seek joint agreement with opponents to oppose any vandalism or violence.	Dr. J. C. Marcum
7/6/89 Butte	Picket	Protesters temporarily halt drilling at site by blocking road to site.	Save Boyd County
7/10/89 OWH	Rally	Use signs, numbers of people to show opposition to waste site.	Save Boyd County
7/13/89 Butte	Ad	Reprint rules of monitoring committee, attend meetings and show opposition to site.	Save Boyd County
7/20/89 OWH	Recall	Signatures gathered for recall of county clerk, suspected site supporter.	Paul Allen and Larry Anderson
7/27/89 Butte	Ad	US Ecology is in poor financial condition.	Save Boyd County

Date/ Newspaper	Tactic	Message	Messenger
7/27/89 Butte	Editorial reprint	Omaha World-Herald: failure to recall election shows county ready to thoughtfully discuss issue.	Cindy Schroetlin
7/21/89 OWH	Appointment	Butte fire chief, site supporter, appointed to monitoring committee.	Governor Orr
8/31/89 Butte	Letter to Editor	Richland, Washington, not as bad as people would have you believe.	Art Frasch
9/14/89 Butte	News Release	Updates on site studies at three sites.	US Ecology
9/14/89 Butte	Letter to Editor	AMA article on safe disposal of low-level radioactive waste part of communist plot.	John Schulte
9/14/89 Butte	Bus Tour	Open invitation to next People For Progress sponsored bus tour of University of Nebraska-Lincoln lecture, Hallam plant, and Ft. Calhoun.	People For Progress
9/18/89 OWH	Celebrity Visit-Rally	Supporters downplay risk of low-level radioactive waste site.	Marvin Resnikoff
9/21/89 OWH	Election	Federal law may prevent Hugh Kaufman from running for state attorney general, as he had earlier announced.	Hugh Kaufman
9/28/89 Butte	Rally	More than 600 opponents attended Nora rally, according to article submitted and paid for by Robert Hoffman.	Robert Hoffman

Date/ Newspaper	Tactic	Message	Messenger
9/29/89 OWH	Hearing	Hearing to be held at request of Concerned Citizens to determine if work at Auburn site harms wetlands.	Diane Burton
10/5/89 Butte	Appointment	Two South Dakotans appointed to Save Boyd County board.	Jim Selle
10/15/89 OWH	Article	Overview of local conflicts accompanying low-level radioactive waste issue in all three counties.	Proponents and opponents
10/23/89 OWH	Article	Opponent says US Ecology data shows Butte site unsuitable due to wetlands, access; John DeOld disagrees, says such conclusions are premature.	Jim Selle
10/26/89 Butte	Letter to Editor	Tired of opponents finding fault with everyone, from Congress on down.	Ken Reiser
11/2/89 Butte	Letter to Editor	Supporters will receive financial gain if facility is located in Boyd County.	John Schulte
11/18/89 OWH	Media Tour	Nuckolls County residents support site, despite harassment from opponents.	Sharon Wilton and Yale Meyer
11/23/89 Butte	Ad	Explanation of radioactive terms.	US Ecology
11/30/89 Butte	Ad	Supporters' actions show they are out to save money for themselves, not support county.	Leroy Kaczor

Date/ Newspaper	Tactic	Message	Messenger
11/30/89 OWH	Appointment	Opponents get board to ask appointee to Nuckolls monitoring committee to step down.	Don Williams, LBNRD
12/7/89 Butte	Letter to Editor	Supporters spending money for propaganda on waste issue.	Rose Selle
12/7/89 OWH	Report	Monitoring committee subcommittee leaks report asking for work to stop at Butte site.	Jim Selle
12/14/89 Butte	Letter to Editor	Like in China, freedom of speech is prohibited.	Candy Lavington
12/21/89 Butte	Letter to Editor	Legislature needs to hear from Boyd County residents if grant funds are to be distributed as we wish.	Ken Reiser
12/30/89 OWH	Article	Save Boyd County will enlist other groups and raise money to continue fighting Butte site selection.	Lowell Fisher
1/4/90 Butte	Letter to Editor	Boyd County full of "real Americans" ready to fight for our rights and against the waste facility.	Paulette Blair
1/11/90 Butte	Public Meeting	Announcement of meeting to be held in Niobrara to enlist neighboring county in fight against facility.	Save Boyd County
1/11/90 Butte	Reprint Letter	Letter from radiation safety officer with amounts of waste US Ecology will dispose from Richland.	Harold Schumann

Date/ Newspaper	Tactic	Message	Messenger
1/11/90 Butte	Party	Report that supporters gathered to support Butte site selection.	People For Progress
1/18/90 Butte	Letter to Editor	Tightening liability laws would better protect Nebraska.	State Senator Spencer Morrisey, submitted by Save Boyd County.
1/18/90 Butte	Letter to Editor	Report that supporters celebrated pick ironic since few in county really do support choice.	Tammy Drickey
1/24/90 OWH	News Release	Towns of Spencer and Naper appoint Lynn Moorer, Lincoln opponent, to be monitoring committee representative.	Spencer and Naper mayors
1/25/90 Butte	Letter to Editor	Boyd County should secede from Nebraska and join South Dakota.	Howard Miller
1/26/90 OWH	News Release	Monitoring committee appointment belongs to Butte and not Spencer; DEC concurs.	Ron Schroetlin village chairman
2/1/90 OWH	Lawsuit	Nemaha County monitoring committee sues to continue functioning, despite Butte site selection.	Concerned Citizens
2/1/90 Butte	Letter to Editor	Waste facility being pawned off on rural people.	Dale Block
2/8/90 OWH	Appointment	Some senators oppose Norm Thorson as compact commissioner, will oppose appointment.	Senator Kristensen

Date/ Newspaper	Tactic	Message	Messenger
2/8/90 Butte	Guest Article	North Carolina chose not to use US Ecology for low-level radioactive waste facility.	Lynn Moorer
2/8/90 Butte	Letter Reprint	Butte has authority to fill monitoring committee vacancy.	DEC letter submitted by Ron Schroetlin
2/11/90 OWH	Visit	Governor visits Lowell Fisher to discuss waste site issue.	Governor Orr
2/13/90 OWH	Resignation	Lowell Fisher resigns as Save Boyd County chairman, supporters speculate on cause.	Lowell Fisher and Ron Schroetlin
2/13/90 Butte	Ad	Reprint of newsletter article - Nebraska has no recourse for sharing waste site liability.	Concerned Citizens
2/15/90 Butte	Letter to Editor	Poem to the tune of "On Top of Old Smokey, lost county to somebody's greed."	Don Boettcher
2/15/90 Butte	Letter Reprint	Letter to media critical of Spencer and Naper attempt to appoint Lynn Moorer.	People For Progress
2/18/90 OWH	Article	Bonesteel, South Dakota "united" against facility.	Rick Schmitz
2/18/90 OWH	Celebrity	Actor Ed Begley, Jr., urges Nebraskans at rally to leave compact.	Ed Begley visit sponsored by Concerned Citizens

Date/ Newspaper	Tactic	Message	Messenger
2/22/90 OWH	Lawsuit	Waste site is unconstitutional because compact law violates Nebraskans 9th and 10th amendment rights.	Concerned Citizens
2/22/90 Butte	Ad	Consider how $2,000,000 could be used to make Boyd County better and stronger, suggested yearly expenditures.	People For Progress
2/25/90 OWH	Editorial Cartoon	"South Dakota Logic," stop US Ecology in Nebraska, not in California.	Jeff Koterba
3/1/90 Butte	Guest Article	Monitoring committee fails to seat Lynn Moorer despite possible legal challenge in her favor.	Lynn Moorer
3/1/90 Butte	Letter to Editor	Editorial cartoon and editorials unfairly critical of South Dakota desire for say in waste issue.	Lynn Moorer
3/1/90 Butte	Ad	Reprint from US Ecology annual report, showing losses from operations.	Submitted by unknown
3/1/90 Butte	Meeting	Public meeting to be held in Atkinson to discuss waste site.	Save Boyd County
3/8/90 OWH	Meeting	National group, Citizens Clearinghouse for Hazardous Waste, schedules meetings in three Nebraska locations.	Citizens Clearing-house for Hazardous Waste
3/8/90 Butte	Ad	Testimonials from supporters of waste facility.	People For Progress

Date/ Newspaper	Tactic	Message	Messenger
3/8/90 Butte	Resolution	Content of proposed Rural Water District resolution opposing waste site.	Save Boyd County
3/8/90 Butte	Appointment	South Dakotan appointed co-chair of Save Boyd County as an indication of committee's desire to see South Dakota involved.	Save Boyd County
3/15/90 Butte	Letter Reprint	Letter sent to media with names of officials to contact for factual information on issue.	People For Progress
3/15/90 Butte	Ad	Map of Great Plains Aquifer and speculation of potential damage caused by waste facility.	Save Boyd County
3/15/90 Butte	Video	Advertisement listing times for running of educational video on local cable television stations.	US Ecology
3/21/90 OWH	Media Visit	"Nightline" to visit Boyd County for future show.	Donna Zidko
3/22/90 Butte	Letter Reprint	Letter outlining poor state of US Ecology Sheffield site.	Sandra Hodgett, Sheffield resident
3/22/90 Butte	Letter to Editor	Low-level radioactive materials can be handled safely.	Phil Anderson, former Nebraskan and scientist at national lab.

Date/ Newspaper	Tactic	Message	Messenger
3/22/90 Butte	Rally and Auction	Report that fund raising auction was successful, raising thousands of dollars.	Save Boyd County
3/29/90 Butte	Ad	Thank you to everyone who helped on auction.	Save Boyd County
4/5/90 Butte	Lawsuit	Citizens file quo warranto challenging Butte appointee to monitoring committee.	C. N. Zidko, Tim Whitley
4/9/90 OWH	Lawsuit	Environmental Protection Agency official offers to help South Dakota officials sue Nebraska over waste site.	Hugh Kaufmann
4/12/90 Butte	Letter to Editor	Boyd County will continue to fight waste site.	Lowell Fisher
4/12/90 Butte	Talk Show	Gregory, South Dakota radio station to sponsor talk show on waste issue.	
4/19/90 Butte	Guest Article	"Pfff" disease affecting local waste site supporters, doctors are worried.	Author unknown
4/19/90 Butte	Reward	Reward offered for information on who fired shots into home of Dr. Marcum.	People For Progress
4/23/90 OWH	Rally	Earth Day rally speech, liability a problem for Nebraska waste site.	Lynn Moorer
4/26/90 Butte	Election	Ad for Phyllis Black, running for county clerk position in the primary.	Phyllis Black

Date/ Newspaper	Tactic	Message	Messenger
4/26/90 Butte	Letter to Editor	Time to end the character assassination and name-calling.	Margaret Honke
4/26/90 Butte	Letter to Editor	Nuckolls grand jury costs $10,000, and Boyd County is getting ready for same, thanks to opponents.	Mardell Janssen
4/28/90 OWH	Meeting	At meeting sponsored by Nebraska Medical Society, waste site risk is called negligible.	Penn. physician
5/3/90 Butte	Election	Ad for Robert Dahlberg for county supervisor, in opposition to site supporter.	Robert Dahlberg
5/10/90 OWH	Article	Hanford, Washington, waste site poses leakage danger.	Westing-house
5/10/90 Butte	Election	Ad for Ken Boettcher for county supervisor, in opposition to supporter.	Ken Boettcher
5/10/90 Butte	News	Vandals again strike Save Boyd County signs.	Save Boyd County
5/17/90 Butte	Letter to Editor	Transportation one more concern about waste facility.	Marvin Resnikoff, founder of Radio-active Waste Exchange
5/24/90 Butte	Meeting	Dr. William Freudenberg to speak at monitoring committee meeting.	Author unknown
5/31/90 Butte	Scholar-ships	Announcement of US Ecology scholarships to local high school students.	US Ecology

Date/ Newspaper	Tactic	Message	Messenger
6/1/90 OWH	Letter	Lowell Fisher wrote Jim Neal to protest US Ecology news release saying Spencer-Naper school board's vote against participating in scholarship program prohibited students from participating.	Lowell Fisher

Total articles: 102

Key

Butte: articles appearing in Butte Gazette and Spencer Advocate.

OWH: articles appearing in the Omaha World-Herald.

* 'Guest article' indicates those articles which were clearly biased to one point of view, but which appeared as standard newspaper articles, notably in the Butte/Spencer paper.

Appendix G

Messengers and Messages

Matrix of Messengers

Pro		Anti		Both		
L	O	L	O	L	O	Message
	1					Nuclear power best option
			1		1	Opposes site (generally)
				1		Site may or may not pose dairy concern
		3	1			Stop work due to wetlands damage
			1			Reports of INEL problems exaggerated
7	1					Opposition tactics criticized
1	5					Positive safety message(s)
		2	2			Negative safety message(s)
					1	DEC setting up monitoring committee
1	1					Local support growing
		4	1			Local opposition growing
1						Supporters gather to celebrate pick

Matrix of Messengers

Pro		Anti		Both		
L	O	L	O	L	O	Message
		2				Monitoring committee not functioning
						Stop work by blocking road
		2	4			US Ecology record/financial condition
	1					Failure of recall is positive sign
		3	1			Save Boyd County will enlist others to fight site
		1	1			"True" Americans oppose facility
		1	2			Site liability will be a problem
		8		1		Supporters ridiculed
		5	1			Opponents seek office/recall incumbent
		1				Supporters implicated in vandalism
		3	1			Monitoring Committee Appointment (negative)

Matrix of Messengers

Pro		Anti		Both		
L	O	L	O	L	O	Message
2	1					Monitoring Committee Appointment (positive)
		3				County being ignored, missing rights
			1			Nemaha committee sues to continue
			1			Norm Thorson opposed for commission
				1		Governor visits Lowell Fisher
				1		Fisher resigns, supporters speculate
		2				South Dakota united in opposition to site
			2			Opposed to Compact, Nebraska involved
3						Facility will bring economic benefits
	1					South Dakota wrong to oppose Nebraska, but not California
		2	1			South Dakota deserves say in waste fight

Matrix of Messengers

Pro		Anti		Both		
L	O	L	O	L	O	Message
	1					When video will run on cable
		1				Nightline to visit Boyd County
		1				Gregory, South Dakota radio station to do show
1						Reward offered in Marcum shooting information
		1				Dr. Freudenberg to speak to local monitoring committee
1						US Ecology announces scholarships
		1				Scholarship news release criticized
17	24	46	21	4	2	Totals

Key
L: locally-originated
O: originated outside of the Boyd County area

Numbers in columns indicate the number of times the message was used.

Note: the total number of messages here comes to 114. In some cases, outside communicators relayed more than one message. In other tables, the key message only is used and the total remains at 102.

Appendix H

Tactics and Messengers

Pro		Anti		Both		
L	O	L	O	L	O	Tactic
1	1	2				News release
	1					Article reprint
3		1	2			Letter reprint
6		11	5			Letter to editor
	2		1			Editorial reprint
2	2	7	1			Advertisement
	1	3	1		2	News article
		1				Letter to Governor
				1		Leaflet
		2				Recall election
		3	1			Candidate for Local/State Office
1						Testimony
1	1	6	3			Rally/Meeting/Auction/Party
		2	2			Lawsuit
	1	2	2	1		Political/committee appointment
		2	1			"Guest" article
			1	2		Celebrity/Political Official Visit

Pro		Anti		Both		
L	O	L	O	L	O	Tactic
	1					Editorial cartoon
		1				Resolution
	1					Videotape
		1				National media visit
		1				Talk show
1						Reward
1						Scholarships
	1					Media tour
		1				Report
			1			Hearing
1						Bus Tour
17	12	46	21	4	2	Totals

Key

L: locally-originated messages

O: originated outside the Boyd County area

Numbers in columns indicate the number of times the message was used.