

PUBLIC INVOLVEMENT CORRELATED WITH LOCAL NEWSPAPER COVERAGE AT A BLOOMINGTON, INDIANA SUPERFUND SITE: A CASE STUDY

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ABSTRACT

For the first time in Superfund history, empirical evidence demonstrates that public response to environmental issues is, in part, correlated with newspaper coverage of local, regional, and national environmental news.

From 1958 to 1977, Westinghouse Electrical Corporation manufactured polychlorinated biphenyl (PCB)-containing electrical capacitors in their Bloomington, Indiana plant. Off-spec capacitors were discarded in area landfills and limestone quarries, creating eight major Superfund sites and 150 suspected minor PCB-contaminated sites. The selected remedial action includes destruction of the PCB-contaminated material in a municipal solid waste (MSW) fueled incinerator and disposal of the resulting ash in an ash landfill.

Citizens who oppose the incinerator have sustained a high level of activism during site cleanup activities. In response, EPA has pioneered an aggressive and innovative community relations program that includes a permanent Public Information Center (PIC) and telephone hotline. Contractor community relations specialists (CRSs) have developed two information databases: one database characterizes the hotline calls received in the PIC over a three year period; the second characterizes the content of local, regional, and national environmental news are reported in local newspapers during the same time period. Analysis of the two databases reveals a significant correlation between the number of hotline calls regarding PCB-related issues and the number of related newspaper articles.

INTRODUCTION

From 1958 to 1977, Westinghouse Electric Corporation manufactured electrical capacitors containing polychlorinated biphenyls (PCBs) as a dielectric insulating fluid. The off-spec capacitors were discarded in area landfills and quarries, a common practice of the time. In 1977, following Congress' enactment of the Toxic Substances Control Act (TSCA) restricting PCB use for most commercial applications, Westinghouse discontinued the use of PCBs.

Eight major and more than 150 suspected minor PCB-contaminated sites were identified as a result of U.S. Environmental Protection Agency (EPA) investigations. The eight major sites were designated as Comprehensive Environmental Response Compensation and Liability Act (CERCLA, also known as "Superfund") sites. Six of the sites are being addressed under the terms of a 1985 consent decree between the EPA, Indiana Department of Environmental Management, Monroe County, the City of Bloomington, and Westinghouse. Subsequently, four of the six Superfund sites scored above 28.5 on the Hazard Ranking Systems (HRS) and were designated as National Priorities List (NPL) sites; the other two sites are being addressed under a CERCLA, Section 106 Order, which requires Westinghouse, as the Potentially Responsible Party (PRP), to clean up the sites.

The Consent Decree specifies remedial actions that include a Westinghouse designed and built municipal solid waste (MSW) - fueled incinerator and construction of a nearby ash landfill to be used for disposal of the ash resulting from incineration of the 650,000 cubic yards of PCB-contaminated material.

PUBLIC INVOLVEMENT

In response to citizens' opposition to the incinerator, the EPA has pioneered an aggressive and innovative community relations program to provide citizens the opportunity for public involvement in the decision making process during site cleanup activities. One of the public information tools employed by the EPA is a permanent Public Information Center (PIC) located in the central business district of Bloomington. A key element of the PIC is a telephone hotline. The PIC and hotline are operated on a daily basis by a contractor Community Relations Specialist (CRS), who serves as an EPA presence in the community and a liaison among the EPA, consent-decree parties, government officials, and citizens. The hotline provides a reliable source of information to citizens and offers them the opportunity to develop a personal relationship with the local EPA representative. The hotline has been invaluable to the EPA in allowing them to monitor the community's level of interest and concern as recorded by the hotline calls received in the PIC.

METHODS

For the first time in Superfund history, empirical evidence has been collected and analyzed to demonstrate that public response to environmental issues is, in part, correlated with newspaper coverage of local, regional, and national environmental news. The contractor CRSs have established and analyzed two computerized databases to characterize information regarding hotline calls with the public and governmental officials: one database characterizes the subject content through telephone conversation records (TCRs) of hotline calls received in the PIC over a three year period; the second characterizes newspaper reports of local, regional, and national environmental news as reported in local newspa-

pers during the same time period. Analysis of the two databases reveals a quantitative relationship between the number of hotline calls regarding PCB-related issues received in the PIC and the number of related newspaper articles.

The TCR database, which spans the period January 1989 to December 1991, contains a total of 1,880 hotline calls (Fig. 1). The database was established from a written log of all incoming and outgoing hotline calls. A majority of incoming hotline calls (855) were placed by members of community or activist organizations (League of Women Voters, Rotary, People Against the Incinerator, Citizens Opposed to PCB Ash) who expressed concerns regarding a specific environmental issue. This paper refers to this group as "activists". Other incoming hotline calls were placed by individuals with affiliations that include Indiana University (203) student, faculty or staff member), the media (79) (radio, television, and print media), and/or the government (469) (Congressional, EPA, state, city or county). The remainder of the calls (284) were from project related vendors and contractor staff. This paper analyzes only the incoming hotline calls from activists.

The newspaper database contains 1,222 newspaper articles (Fig. 2) dated from January 1989 through December 1991. The majority of articles (1,172) were published in one of the two local newspapers (Herald-Times or Indiana University Daily Student). Only the local newspaper articles during the same time period were analyzed in the current study.

RESULTS AND DISCUSSION

The two databases allow a quantitative assessment of the relationship between the number of hotline calls placed by activists and the number of local newspaper articles regarding

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Fig. 1. Hotline calls.

PCB-related issues. The analysis presented herein supports

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Fig. 2. Newspaper articles.

the hypothesis that an increase in the number of newspaper articles is associated with an increase in the number of hotline calls.

No record was maintained in the TCRs to identify the activity or event that prompted a hotline call. Activities or events that may have prompted hotline calls are community events, on-site cleanup activities, personal observations of unexplained site activities, public meetings, or newspaper articles of environmental interest.

The Lotus statistical formulas employed in this analysis can only distinguish correlations. An increase or decrease in the number of hotline calls follows an increase or decrease in the number of newspaper articles. The correlation ($r = .50$) indicates that an increased number of hotline calls is associated with an increased number of newspaper articles. Decreases in the number of hotline calls correlate with specific calendar periods, such as the university calendar (summer months), and the winter holiday season (November through December). The graphic data presented in Fig. 3 suggest a relationship between the total number of local newspaper articles and the total number of activists hotline calls.

A casual relationship between the number of newspaper articles and the number of hotline calls has not been established in this analysis. More detailed analyses of the TCR and newspaper databases, on a monthly or daily basis, are in progress. These analyses could be the subjects of additional papers.

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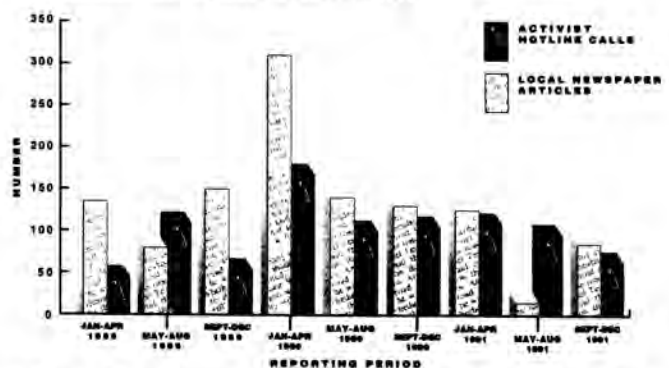


Fig. 3. Local newspaper articles and activist hotline calls.