

**Polychlorinated Biphenyl (PCB) Contamination in Pittsfield, Massachusetts:
An Investigation of Public Participation**

by

Wendy M. Jastremski

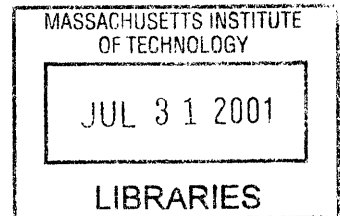
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Signature of Author _____ **ROTCH**
Technology and Policy Program and Department of Urban Studies and Planning
May 11, 2001

Certified by _____
Dr. Nicholas A. Ashford
Professor of Technology and Policy
Thesis Supervisor

Certified by _____
John DeVillars
Lecturer of Urban Studies and Planning
Thesis Advisor

Accepted by _____
Dr. Daniel Hastings
Chairman Technology and Policy Program

Accepted by _____
Dr. Dennis Frenchman
Chairman, Department of Urban Studies and Planning Masters Program

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By Wendy M. Jastremski

Submitted to the Technology and Policy Program and the Department of Urban Studies and Planning on May 16, 2001 in Partial Fulfillment of the Requirements for the Degrees of Master of Science in Technology and Policy and Master of Science in Urban Studies and Planning.

Abstract

This thesis investigates the public participation in agreements reached between various government agencies and the polluter, General Electric, regarding extensive PCB (polychlorinated biphenyl) contamination in Pittsfield, Massachusetts. In this case, government acted as a trustee on behalf of the public's interests in the negotiations. All individuals involved in the negotiation signed contracts of confidentiality, preventing the government agents from sharing details of the negotiation with the public. This stipulation jeopardized the trust between the community and the government agencies and set very real limits on the potential for meaningful public participation. The purposes of this investigation were to: (1) examine these limits resulting from the decision to negotiate with General Electric, (2) make comparisons between the negotiation process and the process followed for sites on the National Priorities List, (3) identify services that the government agencies failed to provide to the community, (4) assess the value added by the public participation mechanisms provided to the public, (5) use the Ashford/Rest model to make suggestions for enhanced public participation in similar cases, and (6) evaluate the application of the Ashford/Rest model to this case.

A site summary provides an overview of the case, including the progression of PCB contamination in Pittsfield, the resulting investigation, and the identification of stakeholders and key negotiators. Chapter Two explains the evolution and involvement of the community groups, government agencies, and other stakeholders in more detail, including the choice whether or not to list the site on the National Priorities List. A literature review summarizes some modern theories on community participation, defines effective involvement, and examines various participation opportunities. Professor Nicholas Ashford and Dr. Kathleen Rest have developed a model for ideal community involvement from the study of several Superfund sites. Only sites where the public participation was considered to have been "successful" were included in the Ashford/Rest case studies. In Chapter Four, the Ashford/Rest model is used to evaluate the effectiveness of the community involvement in Pittsfield. The thesis conclusion offers some final insights into the case and comments on the adequacy of the Ashford/Rest model in evaluating the public participation in Pittsfield.

Thesis Supervisors: Dr. Nicholas A. Ashford
Professor of Technology and Policy
and
John DeVillars
Lecturer of Urban Studies and Planning

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Introduction

The Site

In 1903, General Electric purchased an electric transformer manufacturing plant from Stanley Electric in Pittsfield, Massachusetts. As the nation's power needs increased exponentially, GE's success boomed. The plant expanded to include 250 acres of Pittsfield land, bordering the Housatonic River. At its peak, the site employed 15,000 people. The transformer manufacturing plant began to produce and use PCBs (polychlorinated biphenyls) in 1929 when the federal government required the use of an insulating and surge suppressing device or chemical. PCBs are excellent chemicals for this purpose. They were used in the form of an odorless, tasteless, colorless, oily liquid. During the manufacturing process, millions of gallons of PCBs were spilled or leaked into the ground and river, which was not specifically prohibited by law at that time (*The Berkshire Eagle* 1998).

Unfortunately, at the time of their use, people were not aware of the hazards of PCBs in the environment. PCBs bioaccumulate in fish and mammals and can reach levels thousands of times higher than ambient levels because the organic chemicals are stored and not readily excreted from the body. For example, in the late 1990's, a four-month-old bald eagle killed by a train along the Hudson River (another GE PCB contamination site) was found to have high enough levels in its fatty tissues to be disposed of as hazardous waste (Sandvik 1998). As scientific knowledge increased over the years, PCBs were found to be a likely carcinogen. "Likely" means that animal studies show PCBs cause cancer; however, one cannot say "definite carcinogen" and also allow for the scientific uncertainty of extrapolation to humans. A likely carcinogen is the worst official ranking, above probable carcinogen, which is above possible carcinogen, etc. (ATSDR 2000).

Toxic Substances Control Act (TSCA)

The unintended environmental and human health impacts from industry's use of PCBs, CFCs, and asbestos helped motivate Congress to pass the Toxic Substances Control Act of 1976

(TSCA). The main purpose of the Act was to prevent the entrance of inadequately tested chemicals into the market by providing regulatory controls for chemicals that may threaten human health or the environment. In the case of PCBs, it was not until hundreds of millions of pounds of the chemical were released into the environment that their persistence and toxicity began to receive attention (Office of Toxic Substances 1976). PCBs were one of the first chemicals regulated under TSCA; Section 6(e) mandates the development of regulations for PCBs. In February of 1978, thirteen months after the Act went into effect, EPA issued rules for marking and disposing of PCBs. In April of 1979, EPA issued final rules prohibiting the manufacture of PCBs. Three months later, PCBs processing, distribution, and all non-enclosed uses were prohibited (Ashford 1996).

PCB contamination is perceived as a serious threat to human and environmental health. Communities across the country are now dealing with PCB contamination and cleanup, but few cases are as serious as in Pittsfield (EPA 2000). The standards for remediation set by the TSCA are stringent, requiring 99.9999% PCB destruction using incineration for remediation (TSCA 1976). Prior to determining the appropriate cleanup regime, stakeholders must examine several site factors, such as the geology and hydrology of the site, the degree to which the pollution should be removed, and the costs of the remediation. Site testing must be done to determine the extent and boundaries of the contamination. Once this is done, there are several PCB cleanup processes to choose from. These include incineration, in-situ vitrification, bioremediation, chemical dechlorination, solvent extraction, and stabilization. These methods have been evaluated in their ability to meet the TSCA standards (Amend 1992).

After the Environmental Protection Agency (EPA) responded to the mandate in TSCA by banning the use of PCBs, GE substituted other spark suppressors, such as Freon, dry type, and mineral oil. These replacements were not as effective spark suppressors or insulators in the electric transformers, reducing the transformers efficiency slightly. They were also more expensive for GE to use. However, they pose much less of a human health risk (Michael Carroll 2000).

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 authorizes the federal government to identify actual or potential hazardous waste sites and take corrective action to remedy the situation. Corrective Actions include all measures that EPA sees fit, from investigations, studies, and injunctions to full-scale cleanups. Polluters' liability is joint and several, meaning that responsible parties can be liable for the entire cost of cleanup even if they only contributed to the problem in part. EPA determines the quality of the cleanup under the CERCLA, and can sue responsible parties for up to three times the cost of the cleanup, recovering funds and imposing a monetary penalty (Section 107). The Act established the National Priorities List (NPL). The NPL is a list of the highest priority hazardous sites. The EPA composes the list after making initial site inspections and calculating a numerical score based on the findings. The unhealthiest sites are placed highest on the list (CERCLA 1980).

The legislation requires EPA to inform other interested parties affected by the contamination and the cleanup of contamination (mainly those who had suffered losses, community members, local and state officials) on the progress of the cleanup and lawsuit (Section 117). Congress did not intend for CERCLA to compensate parties who had suffered losses from the contamination (Section 310). Other laws provide these individuals with the standing to sue the responsible parties, such as the Clean Air Act, the Clean Water Act, the Endangered Species Act, tort law, etc. (Ashford 2000).

The Superfund law sent a strong message to industry that the government was serious about enforcing these environmental regulations. However, there have been many problems with CERCLA, including: more money spent on legal fees than on remediation fees, some remedies have been inappropriate, not enough sites have been cleaned up, cleanups are too slow, and cost recovery from the responsible parties has been inadequate, to name a few. Therefore in October of 1986, Congress passed the Superfund Amendments and Reauthorization Act (SARA). SARA allowed EPA to tailor cleanups specifically to the site, instead of forcing everything to be cleaned up to residential standards. Properties need to have a "final solution," which can include

easements on the remediation - meaning sites are (sometimes far) less than pristine. SARA allows for settlements to take place outside of court and increases state and local participation in the cleanup process, in an attempt to speed up cleanups, and therefore cleanup more sites (SARA 1986).

CERCLA also provides for Natural Resources Damages (NRD), to be estimated by a Natural Resource Damages Council (NRDC) made up of representatives from government agencies trained to value natural resources. The NRDC assesses the damages and either brings a claim to the courts to recover the damages or settles with the responsible party out of court. These damages include not only the cost to restore the area, but compensatory damages for the loss of the benefit the natural resources could have provided while they were damaged and while the remediation was ongoing. CERCLA requires the NRDC to consider public input in the creation of a restoration plan for the remediated area. Restoration does not begin until remediation has been completed. CERCLA provides a general model for NRD actions concerning hazardous wastes, not petroleum contamination sites (EPA 2001).

The Investigation

An official investigation of the GE Pittsfield site began in 1981 when GE signed a consent agreement with EPA and the Massachusetts Department of Environmental Protection (MA DEP). This was an agreement to allow and contribute to an investigation of the PCB contamination that had occurred over the 50 years of the chemical's use. In 1982, GE submitted a report, Past Hazardous Waste Disposal Practices, which identified only four off-site contamination areas. In 1983, GE additionally reported that there were several thousand pounds of PCBs in the river. This level of pollution in the river created a great level of concern - not only in Pittsfield, but also in all areas down-river from GE. For example, the Connecticut DEP pursued GE on this issue, and in 1984 GE agreed to study cleanup alternatives that would take into account the concern that PCBs would be washed down into Connecticut. As a result of their research, in 1985 GE proposed to move the river rather than undertaking the much more costly remediation of the soil. This solution was not acceptable to anyone but GE (*The Berkshire Eagle* 1998).

Investigations continued, and in 1989 more polluted sites (not on GE property) were reported. Pollution spread beyond the manufacturing grounds because of the nature of the manufacturing practices. For example, "Fuller's earth" was used regularly at GE. According to Webster's Dictionary, Fuller's earth is "a highly absorbent clay-like substance." This absorbent dirt was used to cleanup spills and filter the oily PCBs during PCB production and the manufacture of transformers. The dirt was distributed free-of-charge to anyone who wanted it for yard fill. The U.S. Army Corps of Engineers also used the contaminated soil during the 1940's to fill oxbows in an effort to straighten the Pittsfield reach of the Housatonic River (EPA 2000).

In 1990, GE agreed to let the Massachusetts DEP investigate the plant site, the river, former oxbows, and Silver Lake.¹ In preparation for an expensive cleanup, GE began a study investigating the utility of bacterial breakdown of PCBs, hoping for an innovative, less intrusive, and relatively inexpensive solution. Ultimately, the bioremediation project failed. In 1994, U.S. Senator John Kerry made a public statement charging EPA to use Superfund to force GE to cleanup the Housatonic River. GE removed some of the PCBs from the river in 1995. At that time, this was the largest cleanup of PCBs in history. Still, it was only a portion of the pollution. In 1996, GE was ordered to cleanup a hot spot of PCBs in the river by EPA (using emergency Superfund authority). Next, residential contamination was discovered and publicized (*The Berkshire Eagle* 1998). Many residents began to have their yards tested. Some were contaminated up to 50,000 ppm (part per million), many times over the EPA safe limit of 2ppm (Olson 2000). In 1997 EPA used Superfund again to force GE to conduct source control on the Pittsfield facility. Source control was needed because even though the plant had been closed since 1989, the contamination could still leak and spread from the existing site. Cleanup of the site is still far from completed (EPA 2000).

¹ According to Massachusetts General Laws, it is unlawful to take samples from private property to test for pollution. If GE had not granted permission, authorities would have needed a warrant from the court, stating that the testing was necessary because the public was in imminent danger of harm from the pollution (Shutkin 2001).

Other Relevant Legislation

The Solid Waste Disposal Act of 1965 (SWDA) was passed as title II of the Clean Air Act (CAA). The Act provided for developing federal waste management plans and sharing the costs of making surveys of waste disposal practices and problems with the states. The Resource Recovery Act of 1970 amended SWDA, shifting the concern of the legislation from solid waste disposal efficiency to the reclamation of materials and energy from solid waste (SWDA 1970).

The Resource Conservation and Recovery Act (RCRA) of 1976 was also an amendment to the Solid Waste Disposal Act. The 1976 Act provided clear expectations (through a permitting program) for the handling of hazardous and nonhazardous municipal and industrial waste from cradle to grave. The main goals of the Act were to prevent future contamination of the environment, minimize human health risks, reduce the amount of waste generated, and to conserve energy and natural resources (RCRA 1976). The Hazardous and Solid Waste Amendments (HWSA) of 1984 increased the comprehensiveness of the RCRA requirements and expanded the EPA's enforcement authority regarding hazardous substances. The 1984 Amendments represented the federal government's attempt to prevent future cleanup problems by prohibiting land disposal of untreated hazardous wastes, setting liner and leachate collection requirements for land disposal facilities, setting deadlines for closure of facilities not meeting standards, and establishing a corrective action program. Hazardous Substances are defined by the EPA to include various substances listed as chemicals of concern under other environmental statutes, such as the Clean Air Act and the Clean Water Act, with the exception of petroleum products (HWSA 1984).²

² The petroleum exclusion refers to petroleum products' exception as hazardous materials. The exception includes xylene, benzene, and other hazardous substances that are normally added in the refinery process. However, hazardous substances added to petroleum after the refinery process are regulated under CERCLA (HWSA 1984).

CHAPTER 1. Site Summary

1.1 Brief History

The case study examines some of the consequences from the toxification of Pittsfield, a quiet town in western Massachusetts. A large local employer, General Electric (GE), had been operating in the community since 1903, and had begun using the toxic chemicals (PCBs) in 1929, long before their environmental and human health hazards were well understood. The company complied with national laws in 1979, which banned the chemicals' use. Unfortunately, much damage had already been done to the community, including but not limited to the people, the environment, the wildlife, and the local economy. Current United States legislation holds General Electric legally responsible for damages to property and the environment, but not for damage to human health.

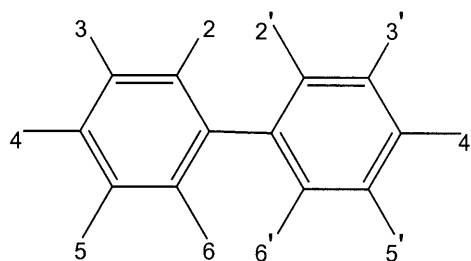


Figure 1.1. - Basic structure of PCBs. Chlorine atoms can occupy any of the numbered positions. Where they do not, a hydrogen atom occupies the site.

History of PCBs

In 1929, the federal government began requiring the use of an insulating and surge suppressing device or chemical in transformers. Air-cooling of transformers was difficult, expensive, and unreliable. PCBs were especially well suited for this purpose. The PCB oil was used to transfer heat from the transformer coils to the metal housing surrounding the coils, which dissipated the heat generated. PCBs were also used as a dielectric medium in heavy-current capacitors, as hydraulic fluids for lifting gears and the like, as heat transfer fluids in heat exchangers, and as fluids in temperature regulators and temperature sensors (*The Berkshire Eagle* 1998).

In response to this 1929 regulation, the Swann Chemical Co. began manufacturing polychlorinated biphenyls (PCBs), a highly toxic mixture of chemicals. Monsanto Industrial Chemicals Co. purchased Swann in 1935 and continued producing PCBs until they were banned.

In less than 50 years, Monsanto and other manufacturers (including GE) produced and sold more than one billion pounds of PCBs. Industry and the public were generally not aware of the health and environmental hazards of PCBs during the time of their use (*The Berkshire Eagle* 1998). PCBs are bioaccumulative; they build up in the fatty tissues of fish, humans and other mammals. They can potentially reach levels that are thousands of times higher in organisms than the levels in the ambient environment (water, soil, and air) because bioaccumulative substances are not readily excreted (Ashford 2000). PCBs can also travel by air. The vapors can remain in the air for up to ten days, enabling the chemicals to disperse over a large range (ATSDR 2000).

In 1970, reacting to concerns over PCB accumulations in the environment, Monsanto began voluntarily restricting its sale of PCBs only to manufacturers of sealed electrical equipment. In 1976, Congress passed the Toxic Substances Control Act for implementation in 1979. The Act required the U.S. Environmental Protection Agency, created by President Nixon in 1970, to identify and ban the manufacture of certain hazardous chemicals (EPA 2000). As knowledge of PCBs impact on biological systems increased over the years, PCBs were defined to be “likely”³ carcinogens (ATSDR 2000). In 1979, the ban went into effect, prohibiting the manufacture of PCBs and PCB-containing products and established strict regulations regarding their future use and sale (EPA 2000).

General Electric in Pittsfield

General Electric purchased an electric transformer manufacturing plant from Stanley Electric in Pittsfield in 1903. As the nation’s power needs increased exponentially, GE grew rapidly to meet demand. The plant expanded to include 250 acres of Pittsfield land bordering the Housatonic River, employing 15,000 people at its peak (Olson 2000). The General Electric (GE) manufacturing facility in Pittsfield, Massachusetts used PCBs in their electric transformer manufacturing processes from 1929 until the 1979 ban. During that time there were no regulations regarding the use of PCBs, therefore little attention was given to their containment and disposal. As a result, during the transformer manufacturing process, millions of gallons of

³ The rating of “likely” is the highest rating available for carcinogens (ATSDR 2001).

PCBs were spilled, leaked, or disposed of improperly, and ultimately found their way into the soil, the groundwater and the Housatonic River (*The Berkshire Eagle* 1998).

General Electric intentionally and unintentionally released PCBs into the soil and water of Pittsfield. GE did not report, monitor, or attempt to cease this pollution because of the lack of environmental laws and policies. Anthropogenic and natural transport mechanisms have since spread the toxic chemicals throughout several surrounding towns and south into Connecticut. The U.S. Environmental Protection Agency and General Electric agreed to a cleanup plan, ratified in October 2000, that will largely remove, contain, and/or control the PCB contamination in and around the land surrounding the GE facility, the Housatonic River, and other contaminated sites (EPA 2000).

The Investigation

An investigation of the GE Pittsfield site began in 1981 when GE signed a consent agreement with EPA and the Massachusetts Department of Environmental Protection (MA DEP). General Electric agreed to allow and contribute to an investigation of the PCB contamination that had occurred over the fifty years of the chemicals' use by the company's Pittsfield facility. In 1982, GE submitted a report, "Past Hazardous Waste Disposal Practices," which identified only four off-site contamination areas. In 1983, GE additionally reported that there were several thousand pounds of PCBs in the Housatonic River. This level of pollution in the river generated great concern - not only in Pittsfield, but also in all areas down-river from the GE facility. The Connecticut DEP pursued this issue with GE, and in 1984 GE agreed to study cleanup alternatives, taking into account the concern that PCBs would be washed down into Connecticut. As a result of their research, in 1985 GE proposed to move the river rather than cleaning up the soil, as remediation of the river would be a more costly solution. The MA DEP, CT DEP and EPA did not accept this cleanup solution (*The Berkshire Eagle* 1998).

Investigations continued throughout the 1980's. In 1989 there were reports of more off-site pollution. Pollution had spread beyond the manufacturing grounds due to the nature of the manufacturing practices and the actions of the people involved in the processes. For example,

GE workers had regularly used "Fuller's earth," which is a highly absorbent clay-like substance. This absorbent dirt was used to cleanup spills and to filter the oily PCBs for reuse during PCB production and the manufacture of transformers. The contaminated dirt was piled on-site and then distributed free-of-charge to anyone who wanted it for yard fill. The U.S. Army Corps of Engineers also used the tainted soil during the 1940's to fill oxbows in an effort to straighten the Pittsfield reach of the Housatonic River (Bonarrigo 2000). Through this and other mechanisms, the contamination was unwittingly spread far beyond the GE facility itself.

In 1990, GE agreed to let the MA DEP investigate the plant site, former oxbows, Silver Lake, and the portion of the river that borders the plant site. Thinking ahead to the possibility of a potentially expensive remediation effort, GE began investigating the utility of bacterial breakdown of PCBs. This form of PCB cleanup has yet to be successful *in situ* (*The Berkshire Eagle* 1998).

In 1994, the situation received further public attention when U.S. Senator John Kerry publicly charged the EPA to use Superfund to force GE to cleanup the Housatonic River. (He had recently gone canoeing on Silver Lake and was compelled by its beauty to push for its cleanup.) GE removed some of the PCBs from part of the river the following year. At the time, it was the largest PCB cleanup ever accomplished. Yet, it was only a small portion of the PCB pollution in Pittsfield (Olson 2000). In 1996, the EPA ordered GE to cleanup a PCB "hot spot" in the river (a highly concentrated area of PCBs in the river sediment). Extensive contamination of residential sites was discovered and publicized shortly after the EPA mandate (*The Berkshire Eagle* 1998). Many residents began to have their yards tested. Some suburban areas were contaminated up to 50,000ppm (parts per million), which is exceedingly high compared to the EPA safe limit of 2ppm for residential properties. The EPA used Superfund authority again in 1997 to force GE to conduct pollution source control on the Pittsfield facility as the PCB contamination could still leak and spread from the existing site. Cleanup of the site remains far from completed (Olson 2001).

1.2 Outline of Site Actors

Local Level Actors

Municipal Institutions:

City of Pittsfield

Pittsfield City Council

Pittsfield Economic Development Authority (PEDA)

Community Groups:⁴

Housatonic River Initiative (HRI)

Housatonic River Restoration, Inc. (HRR)

Get R.E.A.L. (Residents Environmental Action League)

Citizens for PCB Removal

Housatonic Valley Association (HVA)

Berkshire Natural Resource Council

H.E.A.L. (Housatonic Environmental Action League)⁵

⁴ None of the community groups were permitted to attend the negotiations.

⁵ H.E.A.L. is a community group based in Connecticut, with members from along the CT stretch of the Housatonic River. Although the group is not directly involved in Pittsfield, H.E.A.L. works with the HRI and others in Pittsfield to learn more about the contamination of the Housatonic.

State Level Actors

Massachusetts Department of Environmental Protection (MA DEP)

Massachusetts Department of Public Health (DPH)

Connecticut Department of Environmental Protection (CT DEP)

Massachusetts Office of Dispute Resolution

Massachusetts Attorney General's Office (MA AGO)

Connecticut Attorney General's Office (CT AGO)

Massachusetts Division of Fisheries and Wildlife

Massachusetts Executive Office of Environmental Affairs (EOEA)

Federal Level Actors

U.S. Environmental Protection Agency (EPA)

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Geological Survey (USGS)

U.S. Department of Justice (DOJ)

National Oceanic and Atmospheric Administration (NOAA)

U.S. Fish and Wildlife Service

U.S. Department of the Interior (DOI)

1.3 The Negotiation

On October 7, 1999, the chief negotiators for the Pittsfield site stakeholders reached a comprehensive agreement relating to General Electric's Pittsfield facility and the Housatonic River. U.S. District Court Judge Michael A. Ponsor approved the Consent Decree on October 27, 2000. The several hundred-page agreement, the Consent Decree, represents the conclusion of a long, tiresome struggle fought by representatives from GE and the government agencies (mostly EPA) to reach a consensus on the Pittsfield PCB contamination (EPA 2000).

The Consent Decree provides for cleanup of the Housatonic River and associated areas, cleanup of the General Electric Plant facility, environmental restoration of the Housatonic River, compensation for natural resource damages, recovery of government funds spent on past and future response costs, and the effect and form of the Consent Decree. The agreement includes provisions for enhanced public participation, brownfields redevelopment and economic aid. A “Definitive Economic Development Agreement” between GE, the City of Pittsfield, and the

Pittsfield Economic Development Authority (PEDA) provides for redevelopment of the GE Plant facility and \$10 Million in direct economic aid for the City of Pittsfield. That agreement became effective upon entry of the Consent Decree. EPA's summary of the Consent Decree (*Appendix A*) was posted before the other parties to the agreement had

The Negotiating Parties

- General Electric Company
 - The City of Pittsfield
 - Pittsfield Economic Development Authority

 - Massachusetts Department of Environmental Protection
 - Massachusetts Office of the Attorney General
 - Massachusetts Executive Office of Environmental Affairs
 - Connecticut Department of Environmental Protection
 - Connecticut Office of the Attorney General

 - U.S. Environmental Protection Agency
 - U.S. Department of Justice
 - U.S. Department of Interior
 - National Oceanic and Atmospheric Administration
- (EPA 2000)

a chance to approve the summary to provide the public with the information as soon as possible. The actual Consent Decree that represented the final, binding agreement between the parties was made available to the public at four locations (EPA 2000).

The lead negotiator for the Environmental Protection Agency was John DeVillars, Administrator of EPA New England. Without DeVillars' approval, the negotiations would not have been possible and EPA would have been required by law to sue GE under CERCLA instead. The Project Manager for EPA, Bryan Olson, played a key role in negotiations. While DeVillars was the final word on negotiations with GE, Olson worked closely with the EPA investigators, the Pittsfield Mayor, GE, Pittsfield citizens, and environmental groups. DeVillars often relied on Olson to inform him with the latest information so DeVillars could be sharp at the negotiations (DeVillars 2000).

John (Jack) F. Welch, the Chairman and Chief Executive Officer of General Electric was directly involved in the negotiations. GE had a special interest in resolving the Pittsfield case favorably because of the impending Hudson River cleanup, a more extensive site. Welch also played a key role by setting a precedent within the company by permitting the reuse of outmoded facilities, despite possible liability. Since some of GE's facilities would be reused instead of abandoned permanently, there would be more potential risk for GE; however, it was advantageous for the City of Pittsfield to inherit the use of the buildings and property instead of GE leaving a vacant lot. GE's Vice President of Corporate Environmental Affairs, Steven Ramsey, led the GE team in the negotiations. Ramsey threatened to challenge the carcinogenic nature of PCBs to draw out a court battle indefinitely, which would have cost EPA exorbitant legal fees. Ramsey was a former Chief of the Environmental Enforcement Section for the U.S. Department of Justice, and was deeply knowledgeable about CERCLA (DeVillars 2000).

Two local politicians Mayor Gerald S. Doyle and Thomas E. Hickey, Jr., the City Council President for Pittsfield, participated in much of the negotiations (Olson 2001). Hickey was forced to sell his home and move due to PCB contamination. Hickey's current employer, General Dynamics, gave him time off to participate in the negotiations (*The Berkshire Eagle*

1998). Before General Dynamics, Hickey had worked for GE. Mayor Doyle's father was also a former GE employee (Gray 2001). There were no other members of the community present at the negotiations (Olson 2000).

Whether or not to include other members of the community was never debated, since it was understood that doing so would result in GE abandoning the negotiations. Some community members were comforted knowing that Doyle and Hickey were present. Others, such as the Housatonic River Initiative, felt it was only a political move on their part. Allegedly, Mayor Doyle had not attended any of the hundreds of public meetings that had taken place before the negotiations began. Some residents believed that Doyle's father had even delivered some of the contaminated fill materials. Others were suspect of Hickey's loyalties, since he had worked for over 20 years at the Pittsfield plant (Gray 2001).

1.4 Description of Community Groups in Pittsfield

Residents concerned with the PCB contamination began to gather together in the evenings to trade tidbits of information in an effort to decipher the complex puzzle unfolding before them. A few would gather one evening, perhaps speak to a neighbor the following week, and then there would be another person at the next gathering. These informal "kitchen meetings" gave birth to at least two community activist groups in Pittsfield: the Housatonic River Initiative (HRI) and Citizens for PCB Removal. The founding members of Get R.E.A.L. were originally part of the Citizens for PCB Removal. Originally focusing on common issues, individuals chose between two different paths along the journey. Citizens for PCB Removal originally formed to work on resident fill issues. Those who broke off to form Get R.E.A.L. focused on residents' lawsuits against GE; those who remained a part of Citizens for PCB Removal avoided the litigation issues. A fourth group of people, interested in the allocation of natural resource damages, joined together to make up the Housatonic River Restoration organization. Unfortunately for all these groups, the journey is far from over (Gray and Fletcher 2001). Several issues have not been closed on the case, such as remediation below the two miles of Housatonic immediately

downriver from the GE plant and how to spend the Natural Resource Damages. Also, there is always the potential for new discoveries of more PCB contamination.

The Housatonic River Initiative (HRI)

Concerned citizens formed HRI in the early 1990's, intending to force GE to cleanup the Housatonic River and the rest of Pittsfield. HRI has stood out as the most active community group in Pittsfield. Tim Gray and Mickey Friedman, two men who live in rural towns outside of Pittsfield City, have been extremely vocal to the government agencies, local media, and other residents about the dangers of PCBs. Neither man has had any past connection with GE. Although HRI started out focusing mainly on the cleanup of the Housatonic River, Woods Pond, and Silver Lake, their interests have expanded to include all issues around PCB contamination in Pittsfield. For example, HRI filed a motion to intervene against the Consent Decree, unhappy about the contaminated fill that is to remain across the street from a local elementary school (dumpsite Hill 78). HRI settled with EPA and dropped the lawsuit against the Consent Decree, in return for the promise of the installation of a leachate liner for a different dumpsite (Hill 71). The group is still extremely vocal about wanting treatment of the wastes instead of dumping the waste in Pittsfield, for instance by publishing research challenging the safety of the dumping and incensing the community with comparisons of the cost of full treatment to the CEO of GE's annual salary (Gray 2001).⁶

Citizens for PCB Removal

A second group formed in 1997, also from kitchen meetings. This group, Citizens for PCB Removal, intended to secure for the city: 1) a thorough cleanup, 2) open options for addressing contamination problems in the future, and 3) the certainty that GE would bear the greatest burden in the Consent Decree. In a letter to the EPA and the Justice Department, sent soon after the Consent Decree was made public, Citizens for PCB Removal expressed its dissatisfaction with

⁶ According to HRI, CEO Jack Welch made \$86.3 Million in 1998. HRI estimates the full treatment (vs. dumping) of soil removed from two miles of the Housatonic, soil from the elementary schoolyard, and from all the residential and commercial properties on one particularly contaminated street (Newell Street) at about \$46 Million, about half the CEO's annual salary. Dumping costs about 1/10 of treatment methods.

the Consent Decree on eleven different points (See Appendix B). The group expressed in interviews that they like and trust the representatives from EPA who had worked with the people of Pittsfield, but they distrusted MA DEP representatives. They made sure to note that despite trusting EPA, they did not necessarily agree with EPA on all topics, including Hill 78 (50 yards from a local elementary school). One member indicated that she “trusted Bryan Olson,” (EPA representative) but doubted a toxic landfill across from an elementary school was safe (Anonymous Member 2001).

Get R.E.A.L. (Residents Environmental Action League)

This organization formed in 1998, made up of separatists from Citizens for PCB Removal, to specifically address the needs of residents living on fill properties, including the filing of lawsuits against GE for property damages. (Citizens for PCB Removal did not want to spend time and effort on lawsuits.) In the 1950's and 1960's, General Electric offered free fill to homeowners and developers in Pittsfield. In 1997, testing revealed PCB contamination on hundreds of properties, up to 25,000 times the EPA safe limit for residential properties. The testing occurred because of anonymous tips from former GE employees on a toll free number managed by MA DEP. The remediation of these fill properties are not addressed in the negotiated agreement; however, the rights of the owners to sue GE for property damages are compromised by the same agreement. MA DEP assumed the role of managing GE-funded cleanups of these sites (Orsi 2001).

Citizens were not satisfied with the resident fill cleanups for various reasons, including the averaging of the contamination instead of achieving the safe limit in all areas of the yard and the condition of the properties after the contractor's remediation (for example not enough topsoil to grow grass). The mission statement of the group (as stated by one of their leaders, Bobbi Orsi) is to address the “many issues directly affecting the lives and rights of homeowners (that) have not been addressed. PCBs surround our lives. We're fighting to get back what should rightfully be ours: our homes and our neighborhood.” Get R.E.A.L. had demanded “a seat at the table” to represent residents on fill properties at the negotiations, presenting a petition with hundreds of signatures to the negotiators. They were told that their concerns were not being discussed at the

meeting. However, when the negotiated Consent Decree was released for public comment, the decree listed all the addresses of the contaminated properties found to date. In GE's quest to limit liability, the decree postulates a finite end point on the responsibility for those properties (Orsi 2001). Newell Street commercial and residential contaminated property owners filed motions to intervene against the Consent Decree. The court did not grant an intervention (Olson 2001).

The first 14-18 residential properties were cleaned entirely to the 2ppm residential standard. After that, the yards were averaged so that less cleanup had to be done. This was perceived as unfair because the earlier properties were "cleaner" than the properties remediated later. In hindsight, Get R.E.A.L. wished they had had a Licensed Site Professional (LSP) on board to help them fight this decision. The decision to average the properties "felt wrong, but they lacked the knowledge to argue against it" (Anonymous Member 2001). EPA and MA DEP offered support through public meetings and home visits. The agencies provided a handbook on PCBs, but the information contained in it was too basic to be useful. It was a good start, but left people powerless. MA DEP and EPA did include their own phone numbers in the handbook so that citizens could call with questions, but according to one member of the group, "We didn't even know the right questions to ask" (Orsi 2001).

A representative from HRI had visited the affected neighborhoods, updating the residents on the information HRI had gathered and their experiences with the agencies and GE thus far. The representative advised the residents that there were experts in the community that could provide technical assistance. He promised HRI's assistance, but HRI was unable to help enough. After it was too late, the residents came to the conclusion that they had needed someone with a full-time job providing technical assistance, not just volunteer workers with other responsibilities. They were struggling to read a plethora of complicated documents on their own (Orsi 2001).

A year and a half later, a representative from Toxics Action (an environmental group outside of the community) suggested applying for a technical assistance grant. The MA DEP gave the

residents a \$10,000 technical assistance grant, which the group used to finally hire a LSP.⁷ By then, over 80 properties had been remediated, most with the averaging technique contested by Get R.E.A.L. It was too late for the LSP to impact the averaging policy for future cleanups. The LSP reviewed the remediation plans, made suggestions, and crafted a point system to prioritize cleanups which took into account how much people use their yards by factoring in children living in the home, gardens, etc. He also provided residents with more detailed fact sheets on PCBs. But after only six months, the LSP changed careers (Orsi 2001).

Housatonic River Restoration, Inc.

The Housatonic River Restoration, Inc. (HRR) was formed in the late 1990's to address post-remediation issues and the distribution of millions of dollars in natural resource damages (NRD). After the remediations are completed, the responsible party is usually forced to pay an amount of money to restore the remediated areas to their natural state or other agreed upon condition. With NPL sites, this dollar amount is estimated at the end of the cleanup, and once the site is removed from the NPL, the natural resource trustees have three years to take recourse if more damage compensation is needed. The trustees form a Natural Resource Damages Council (NRDC). In the case of the Housatonic River, the damages⁸ will be shared between Massachusetts and Connecticut (Olson 2001). The NRDC for the Housatonic is comprised of representatives from the following government agencies: NOAA, DOI, U.S. Fish and Wildlife Service, MA EOE (Fish and Wildlife Division), CT DEP, and the CT Bureau of Natural Resources (BNR). The purpose of the NRD is to "restore injured natural resources and the services they provide to the greatest extent practicable." NRD also compensates the public for injury to the environment and lost use of the environment before, during and after response actions or "compensatory restoration." The compensatory restoration projects begin after remediation has been completed and are administered by the natural resource trustee agencies (EPA 2001).

⁷ Hiring a LSP for the community was no easy task. Any LSP that had done contract work for GE in the past could not work for the citizens due to a "conflict of interest." Get R.E.A.L. was unable to find an LSP without a conflict of interest west of Worcester, which is located over an hour east of Pittsfield.

⁸ Primary Restoration Cost + Compensatory Restoration Cost = NRD

The NRD Sections of CERCLA state that the trustees must develop a restoration plan with public input (EPA 2001). Housatonic River Restoration (HRR) believes all people of the Berkshires should share decisions regarding the restoration of the Housatonic River. To that end, HRR has engaged the many people and groups who really care about the river - residents, municipal leaders, children, farmers, sportsmen, businessmen, scientists, environmental advocates and others. HRR wanted to be ready, if asked or not, with a plan detailing the use of the funds. They had several goals, most importantly to reach consensus with as many individuals as possible. In the creation of a restoration plan, HRR had direct contact with over 1,000 individuals or groups living or working near the river. This project was funded by EPA, the Massachusetts Environmental Trust in partnership with the Berkshire Taconic Community Foundation, and a "Communities Connected by Water" Grant from the Massachusetts EOE (Fletcher 2001).

The second goal was to achieve longevity of their plan, asking these participants to adopt an active role with regards to taking care of the river instead of hiring outside parties to come in, restore the habitat, and depart, leaving local residents out of the process.

“A new generation of alienated residents could await us if we do not capitalize on the sentiment and opportunity of the moment and lay the groundwork for real change. Just as we the residents of Berkshire are the stewards of the river—out of love, not legal mandate—our vision and broad involvement must guide the expenditure of Natural Resource Damage funds in order to ensure a permanent success. If these funds are used for one-time fixes instead of comprehensive, self-perpetuating programs, we will have lost the battle yet again, and another fifty years down the road a fresh round of restoration will be necessary. But if we do invest in such a long-range plan, and in the spiritual as well as physical restoration of the river, and if we bestow that task upon those who will inevitably be responsible for its maintenance, we will have made the most of this moment. Not only will we accomplish the removal of existing contamination, PCBs chief among them, but we will raise a cohort of children who will watch carefully and

prevent such wanton destruction from ever occurring again. We will not only preserve land along the banks and up the mountains' slopes, but ensure that all the land that feeds the river, whether developed or not, is managed with river and aquifer health foremost in mind" (*The Housatonic River Restoration Plan* 1999).

In 1998, HRR published a professional document detailing a comprehensive, permanent plan for the care of river. HRR delivered the document to the NRDC, and hopes it will dictate how the funds from the NRD are used. The document discusses the goals of HRR and the synthesized views of over a thousand individuals (Fletcher 2001).

Citizen's Coordinating Council (CCC)

The Consent Decree specifies the formation of a Citizen's Coordinating Council to achieve enhanced public participation. The objective stated in the decree is as follows: "to implement this agreement in a manner that considers and utilizes the ideas of the citizens of Berkshire County." The Citizen's Coordinating Council has been established to serve as a focal point for community participation in the cleanup. Ironically, the majority of the cleanup has been determined by the Consent Decree, which did not allow for formal and direct public participation. The Council includes leaders from Berkshire County's political, environmental, community, and business sectors. The Council has provided and will continue to provide an important mechanism to ensure that all of the settling parties fully honor their commitment to listen to, learn from, and incorporate the ideas and concerns of the community to the greatest extent possible. It will not be possible for the Council to impact anything already outlined in the Consent Decree. The governments intend to submit drafts of major technical documents to the Citizens Coordinating Council for review and discussion (Consent Decree 2000).

The CCC meetings take place during the first week of every month, after work in the public library. A professional mediator from the Massachusetts Office of Dispute Resolution runs the meetings. The group is not a grassroots organization like the others discussed in this section, primarily because the agencies created the group, and not the residents. The meetings are public,

and some members at the table are from the other local groups, such as HRI, Citizens for PCB Removal, Housatonic River Restoration, Inc., and Get R.E.A.L. Pittsfield (Manasewich 2001).

H.E.A.L. (Housatonic Environmental Action League)

Representatives from this community group first attended a Pittsfield CCC meeting in May 2000 (CCC 2000). The group came to express its interest in joining Pittsfield in the fight of community groups to force GE to clean more of the Housatonic River. The Consent Decree specifies remediation plans for only the first two miles of river extending downriver from the GR plant site, and establishes a process for determining further remediation activities downstream of the first two miles. However, the entire Housatonic River, all the way through Connecticut until its outlet into Long Island Sound, has been contaminated by GE's PCBs (EPA 2001).

1.5 Timeline for Pittsfield, Massachusetts

1903

General Electric began transformer manufacture at the 250-acre plant, which GE purchased from William Stanley, inventor of the power transformer.

1929

General Electric complied with a federal law, which required PCBs in transformer manufacture.

1940s

The U.S. Army Corps of Engineers and the City of Pittsfield filled in eleven oxbows with contaminated soil from the GE site in an attempt to straighten the Housatonic River.

1964

General Electric began reducing PCB discharges to Housatonic River and Silver Lake.

1965

Congress passed the Solid Waste Disposal Act (SWDA), the first federal law specifically regulating hazardous waste disposal.

1968

General Electric recorded the spill and subsequent cleanup of over 1000 gallons of PCBs onto riverbank soil and to the Housatonic River sediments. Adequate cleanup level was determined by sight (i.e. “looks clean”).

1970

President Nixon established the Environmental Protection Agency (EPA). Congress passed the Resource Recovery Act, amendments to SWDA.

1976

Congress passed the Toxic Substances Control Act (TSCA), which outlined the phase-out of PCBs from industrial and other uses. Congress also passed the Resource Conservation and Recovery Act (RCRA), regulating hazardous waste from “cradle to grave.” Locals attending the University of Massachusetts conducted the first known study of PCBs in the river.

1977

The Environmental Protection Agency banned the use of PCBs.

1980

In response to the Love Canal tragedy, Congress passed the Comprehensive Environmental Response, Compensation and Liability Act (Superfund Law).

1981

General Electric, EPA, and the Massachusetts Department of Environmental Protection signed a Consent Decree requiring the study of contamination and cleanup strategies in the Housatonic River.

1982

General Electric identified only four off-site contamination areas in a report to EPA. The MA DEP closed the Housatonic River to all but catch and release fishing on account of high levels of PCBs in fish tissues and river sediments.

1984

General Electric established an agreement with the Connecticut Department of Environmental Protection to study more of the river, since PCBs were believed to have migrated downriver into Connecticut. Congress passed the Hazardous and Solid Waste Amendments (HWSA), which increased the comprehensiveness of RCRA.

1985

General Electric proposed digging a new river instead of dredging the Housatonic to avoid waste treatment costs.

1986

Congress passed the Superfund Amendments and Reauthorization Act (SARA), allowing easements for Superfund sites.

1989

Several sites of PCB-soaked fuller's earth were reported but not yet addressed by the EPA or the Massachusetts Department of Environmental Protection.

1990

General Electric agreed to let the Massachusetts Department of Environmental Protection investigate the plant site, the portion of river flowing along the site, former oxbows, and Silver Lake. Simultaneously, General Electric investigated the utility of bacterial breakdown of PCBs.

1991

Concerned residents formed an environmental action group called the Housatonic River Initiative (HRI).

1993

GE reported their research conclusion that no further studies of the upper river were necessary.

1994

United States Senator John Kerry publicly called for EPA to force General Electric to cleanup the Housatonic River after canoeing on Woods Pond, just south of the center of Pittsfield. EPA obtained permits through RCRA to perform further investigations on the GE site.

1995

General Electric cleaned up some of the PBC contamination by the river in the largest PCB cleanup effort in history. Negotiations between EPA, GE, and MA DEP began.

1996

EPA used their emergency Superfund authority to force General Electric to cleanup a PCB hot spot in the river, a case of “risk of imminent harm.”

1997

Residential contamination announced by MA DEP, who takes charge on the residential cleanup issue. EPA issued a CERCLA Section 106 Order to conduct source control on the GE facility. Concerned residents living on fill properties formed action group called Citizens for PCB Removal. Locals also formed the Housatonic River Restoration, Inc. (HRR) in the late 1990’s to address post-remediation issues and the distribution of natural resource damages (NRD).

1998

Initial cleanup agreement reached between EPA, General Electric, and the Massachusetts Department of Environmental Protection after a breakdown in negotiations. A public comment period of 60 days began when the notice of the proposed Consent Decree was published in the federal register. Some residents in Citizens for PCB Removal formed another group, Get R.E.A.L., focusing on residential fill and lawsuits for property damages.

1999

“The People of Berkshire County” formerly shared their opinion by publishing *The Housatonic River Restoration Plan* with the Housatonic River Restoration, Inc. Mayor Doyle rated 80% satisfaction in the City of Pittsfield; this was the highest rating for a Pittsfield mayor ever.

2000

Federal Court legalized the 1998 Consent Decree. Connecticut environmental group H.E.A.L. joins the CCC meetings in Pittsfield, and succeeds in establishing quarterly CCC meetings to be held in Connecticut.

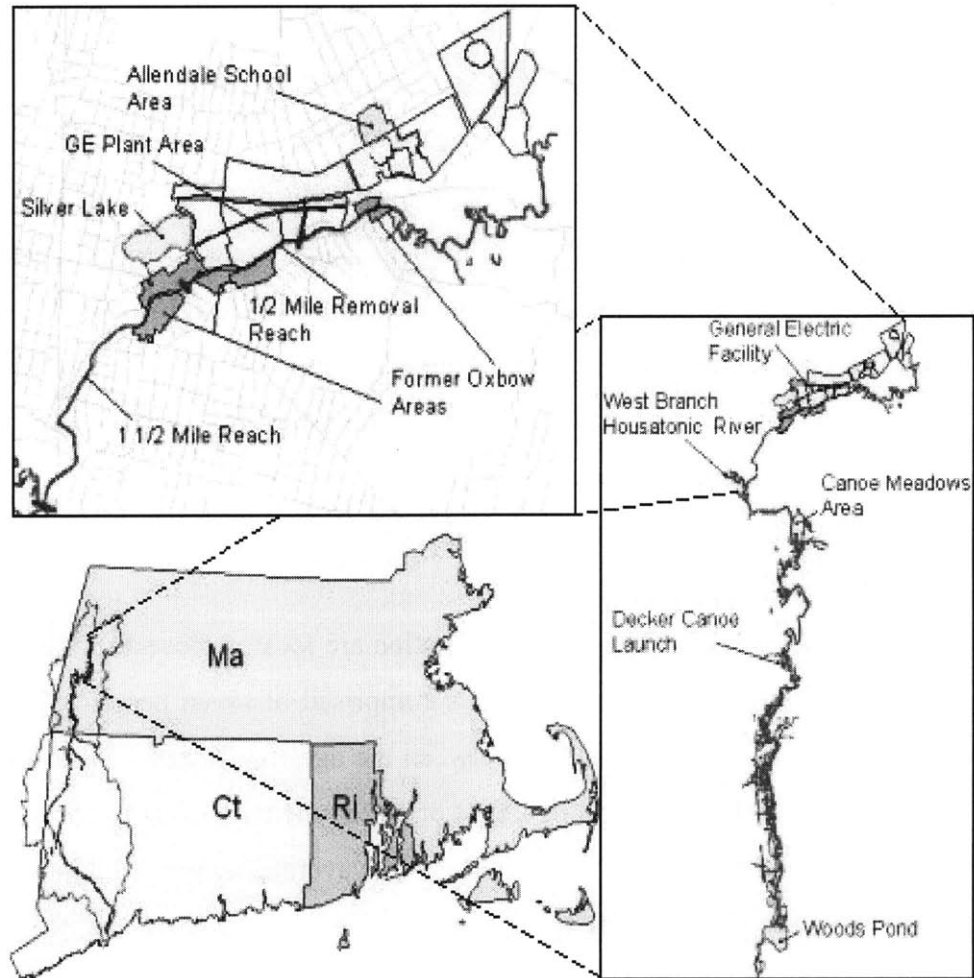
1.6 Pittsfield Demographics

Pittsfield is a small city of almost 46,000, isolated from other small towns in a picturesque rural setting. Residents of the town are primarily white, making up almost 93% of the population of the city (U.S. Census 2001). The Massachusetts Office of the Attorney General classifies Pittsfield as an “economically depressed area” (MA DEP 2001). The City has an unemployment rate that exceeds the state average by 25% or more, primarily because General Electric, once employing 15,000 workers, has downsized their Pittsfield plant to only about 500 workers (Gray 2001). GE has joined many multinational firms in their decision to relocate manufacturing to other countries where labor is cheaper and environmental laws are less stringent.⁹ Over the 1990’s, GE’s U.S. employment fell from 243,000 to 150,000, but its offshore employment actually expanded. GE’s Executive Vice President Frank P. Doyle acknowledged, “We did a lot of violence to the expectations of the American workforce.” (Greider 1997, p.216)

The areas of the town with the most severe contamination are located closest to the plant and the river. The population within one mile of the site is comprised of seven percent (7%) under the age of 10 years old, and eleven percent (11%) between the ages of 10 and 19 years old. There has not been a publicized attempt by local residents or government officials to correlate property values with refill properties. However, it is known that the average income of households within a one-mile radius of the site is \$21,999 (Bonarrigo 1998). One resident has mapped disease clusters, which seem to be concentrated in the refill areas. The Department of Public Health has not performed any formal disease mapping. The refill properties were traditionally owned and lived in by GE plant workers (Gray 2001).

⁹ A United Nations survey found that multinationals “adopted lower environmental standards in their operations in developing countries than those in developed countries, thus exposing workers and communities in developing countries to dangers that would not be accepted in developed countries.” The reason cited is a “greater concern over maximizing profitability... rather than ensuring maximum safety of their operations.” (ESCAP/UNCTC 1990)

1.7 Site Maps



Map of Western Massachusetts, the Housatonic River, and the site of the PCB contamination in and around Pittsfield, Massachusetts. Photo: EPA Website

CHAPTER 2. Site Profile

2.1 Initial Recognition of Problems at the Site and Early History

The Pittsfield community was largely accepting of General Electric's releases of toxic PCBs into their environment. In fact, since GE employed most residents or their loved ones, the community had little incentive to cause a problem with the company. In 1976, a few undergraduates (including local Tim Gray) from the University of Massachusetts were the first to perform a scientific investigation of the river. The students uncovered what most in the town already knew or suspected; very high levels of PCB contamination were present in the sediments, fish, and frogs of the Housatonic River (Gray 2001). The UMASS studies in part led to a large investigation by MA DEP and EPA in 1980. (Other reasons for the study included obvious signs of other types of contamination, such as raw sewage.) During the 1980's, the public largely, if not entirely, ignored the investigations conducted by EPA and MA DEP, which GE agreed to voluntarily. PCB contamination in the river was not news for them (Olson 2001).

It was not until after the downsizing of the Pittsfield plant, which left many locals jobless, that the contamination became news. Citizens began to wonder what would happen to the river and the land if GE left behind all that contamination. Since only 500 out of the once 15,000 GE jobs remained in Pittsfield, few people feared the consequences GE could bring by leaving the community entirely (Gray 2001).

2.2 The Decision to Study the Site

An investigation of the GE Pittsfield site began in 1981 when GE signed a consent agreement with EPA and the MA DEP. This was an agreement to allow and contribute to an investigation of the PCB contamination that had occurred over the fifty years of the chemicals' use. In 1982, GE submitted a report entitled "Past Hazardous Waste Disposal Practices," which identified only four off-site areas. In 1983, GE additionally reported that there were several thousand pounds of PCBs in the river. This level of pollution in the river created a great level of concern - not only

in Pittsfield, but also in all areas down-river from GE. For example, the Connecticut DEP pursued GE on this issue, and in 1984 GE agreed to study cleanup alternatives that would take into account the concern that PCBs could have been or could be washed down into Connecticut. As a result of their research, in 1985 GE proposed to move the river instead of cleaning up the soil (much more costly). This proposal was not acceptable to anyone but GE (*The Berkshire Eagle* 1998).

Investigations continued, and in 1989 more polluted sites (not on GE property, but former oxbows of the river) were reported. Pollution spread beyond the manufacturing grounds because GE donated used "Fuller's earth" to the City of Pittsfield and local residents for fill purposes. According to Webster's Dictionary, Fuller's earth is "a highly absorbent clay-like substance." This absorbent dirt was used to cleanup spills and filter the oily PCBs during PCB production and the manufacture of transformers. The dirt was distributed free-of-charge to anyone who wanted it for yard fill. The U.S. Army Corps of Engineers also used the contaminated soil during the 1940's to fill oxbows in an effort to straighten the Pittsfield reach of the Housatonic River (EPA 2000).

In 1990, GE agreed to let the Massachusetts DEP investigate the plant site, the adjacent portion of the river, former oxbows, and Silver Lake.¹⁰ In preparation of an expensive cleanup, GE began a study investigating the utility of bacterial breakdown of PCBs, which ultimately failed. In 1994, U.S. Senator John Kerry made a public statement charging EPA to use Superfund to force GE to cleanup the Housatonic River. GE removed some of the PCBs from the river in 1995. At that time, this was the largest cleanup of PCBs in history. Still, it was only a portion of the pollution. In 1996, GE was ordered to cleanup a hot spot of PCBs in the river by EPA (using emergency Superfund authority). Next, residential contamination was discovered and publicized (*The Berkshire Eagle* 1998). Many residents began to have their yards tested. Some were contaminated up to 50,000ppm (part per million), many times over the EPA safe limit of 2ppm (Olson 2000). In 1997 EPA used Superfund again to force GE to conduct source control on the

¹⁰ According to Massachusetts General Laws, it is unlawful to take samples from private property to test from pollution. If GE had not granted permission, authorities would have needed a warrant from the court, stating that the testing was necessary because the public was in imminent danger of harm from the pollution.

Pittsfield facility. Source control was needed because even though the plant had been closed since 1989, the contamination could still leak and spread from the existing site. Since an agreement was reached between the government agencies and GE in 1998, remediation activities have been continuing according to the Consent Decree.

2.3 The Original Decision to Act

A national survey conducted by the federal government in the 1960's indicated that approximately 75% of the American people believed that the federal government did the "right thing" most of the time. By the early 1990's, only 20% of Americans shared this faith. The surveys conducted in the 1990's suggest that Americans believe the government wastes 48 cents of every dollar. Over 80% of citizens stated that they wanted "fundamental change" in Washington. The public viewed federal agencies as monopolies, not out to serve the taxpayer but to justify their own existence and meet the needs of politicians (Gore 1998). This national paradigm shift mirrors the changes that happened on a local level in Pittsfield.

The fact that Pittsfield, the Housatonic River, and the GE site were home to hazardous pollution was not unknown to GE workers, members of the community, or to officials in the local government. Many factors, such as the establishment of the EPA in 1970, Congress passing environmental health and safety legislation, and an increasing national awareness of environmental issues (heightened in the late 1970's by the highly publicized Love Canal incident) contributed to a growing concern over contamination in Pittsfield. However, GE's downsizing of the Pittsfield plant was the main reason a decision to act was made by the community. People became demoralized and bitter after losing their jobs. They reflected more on the production processes, especially in light of new research on PCBs and other hazardous man-made chemicals. They began to question their assumptions that something or someone had been protecting them from harm.

The creeping change in perception within the community, coupled with the results from the results from studies conducted by UMASS students, caught the attention of the MA DEP, who

was the first agency to conduct official site investigations on the GE Pittsfield plant site. New safe limits, promulgated by the agency, required the agency to act. The extent of the contamination and its severity necessitated the involvement of the EPA by law. However, on a local level, the Pittsfield community distrusted the EPA. Residents felt that the "feds" were too removed from the realities of living with contamination and could not empathize with their situation. Businesses viewed EPA as a threat to their success and development and feared EPA would label Pittsfield a toxic waste dump. Environmentalists were skeptical about EPA's effectiveness. The City government wanted to fight GE, and did not know if EPA would help or hinder those intentions. MA DEP was in conflict with the EPA over who would take charge of the situation (Bonarrigo 2000). These conditions led to the formation of several community action groups (See Section 1.4).

2.4 Superfund versus Negotiated Settlement

Once the federal government had become involved in the case and the degree of the pollution had been uncovered, the next step was determining how to proceed. On September 25, 1997, pursuant to Section 105 of CERCLA, EPA proposed the overall Site for inclusion onto the National Priorities List (NPL). The sites listed on the NPL are commonly known as Superfund sites. Superfund refers to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), passed by Congress in 1981. Superfund sites are severely polluted areas that threaten public health. The federal government has approximately \$150 Million in the fund. This fund can be used to begin cleanup efforts while the government sues the polluter to reclaim government expenditures (Doyle 2000). From the point of view of the EPA, Superfund is usually a good choice for expensive remediation situations because the polluter usually ends up paying for the cleanup and EPA sets the standards that the site must meet to be considered clean. However, this process cannot guarantee that the full costs of the cleanup will be recovered in the lawsuit. Usually the EPA and the polluter reach some compromise (Bonarrigo 2000).

Despite Superfund's power, not everyone thinks using CERCLA is a good idea. According to Mayor Doyle, the possibility of Superfund was "like a threat over the city's head." One reason

for this view is that the people who live in Pittsfield were concerned about the stigma associated with being publicly labeled one of the dirtiest places in America. They were afraid of losing even more jobs and businesses and therefore more tax dollars, leaving the remaining residents worse off (Doyle 2000).

People were also afraid that all the "red tape" of dealing with the government bureaucracy would stall any cleanup efforts and drag them out indefinitely. They worried that no one would be accountable for the cleanup, and therefore no one would be accountable for achieving results (Olson 2000). They were concerned that with the long list of Superfund sites, Pittsfield might be overlooked, or not get the amount of funding needed to do a thorough cleanup (Doyle 2000). Residents in the community were afraid that whatever method was used to force GE to remediate the contamination, that it would not start soon enough. Understandably, once people began to realize the extent of the pollution, residents wanted it cleaned up yesterday.

These concerns led to the decision made by EPA New England's Regional Administrator, John DeVillars, to attempt a negotiation with General Electric, instead of pursuing the listing of the site on the NPL. In October 1997, EPA and several other agencies (See Section 1.3) formed an intergovernmental team and, with the assistance of a mediator, initiated negotiations with GE. EPA called off negotiations on April 6, 1998, after seven months of talks.

Letter from DeVillars to the Community

In a letter dated April 1998, Regional Administrator John DeVillars informed the public that the negotiations had failed and the site would be listed on the federal National Priorities List of Superfund sites. He stated that the "negotiations failed to produce a plan that met the needs and concerns of Pittsfield and Berkshire County," but that EPA had already developed an action plan for beginning site cleanup. DeVillars acknowledged the "very real public threats" and made a commitment to begin cleanup in the fall. He commended the efforts of Mayor Doyle and City Council President Hickey, who were involved in the negotiations on behalf of the city. A summary of the action plan was included in the letter, along with contact information for Bryan

Olson, GE-Pittsfield site project manager and Angela Bonarrigo, the Pittsfield contact in EPA's Community Affairs Office.

Most importantly, the letter addressed and reassured citizens regarding four of the main concerns within the community, which were as follows:

1. The cleanup might take longer to get started now that the negotiations failed.
2. The Superfund designation will probably stigmatize the city.
3. Because of the stigma, no investors will build here and our economy will suffer with fewer jobs and fewer tax dollars from businesses.
4. EPA is going to stop communicating with us now that the negotiations have failed.

DeVillars assured the community that EPA would begin the cleanup that fall. EPA had developed an action plan, which included immediate enforcement orders for critical cleanup on the GE site and the first two miles of the Housatonic River downriver from the GE plant and a proposal to GE for conducting redevelopment at the GE site. The letter listed some successfully handled Superfund sites, which would serve as models for Pittsfield, including economic redevelopment. Lastly, DeVillars promised the community that EPA would continue to communicate by establishing a Citizen's Advisory Panel, which would meet with government officials regularly in Pittsfield. With CERCLA, the process would actually become more transparent to the public than the closed negotiations. The EPA Action Plan included proceeding with the Superfund listing process and other authorities (EPA 2000).

However, the negotiations with General Electric resumed on June 17, 1998 and in October 1998, the parties reached an agreement-in-principle that included a comprehensive cleanup of the overall site (See Appendix A for a summary of the agreement). On October 14, 1998, EPA Regional Administrator John DeVillars stated in a press release: "By uniting rather than dividing, we have achieved not only a sound environmental outcome, but a substantial economic investment and opportunity, as well. EPA will be a full working partner in turning this plan into the reality of an economic rebirth for Pittsfield" (EPA 2001). GE and the agencies reached agreement on the amount GE will pay to reimburse response costs previously incurred and to be

incurred by the governments in connection with the site. The details regarding the specific reimbursement amounts can be found in the Consent Decree. EPA agreed to defer final decision making on listing the Site on the CERCLA National Priorities List (NPL). EPA may finalize listing the Site, under certain conditions, including if EPA concludes that a situation exists where it needs to take over the cleanup work under the Consent Decree due to inadequate performance by GE, subject to GE's right to dispute resolution (EPA 2000).

After the Consent Decree was filed with the courts, several groups filed motions to intervene. HRI's court appeal for intervention status threatened to ruin the agreement. HRI was not a part of the official negotiations with GE and felt that certain aspects of the cleanup were not addressed satisfactorily. The group wanted a more comprehensive remediation plan. HRI and EPA agreed to negotiate. The two parties crafted an eleven-point agreement, in which EPA agreed to provide extra protections in the cleanup, such as a leachate liner for Hill 71. HRI would have pressed for more precautions had they been present at the negotiations between GE and the government agencies. According to EPA, if HRI had been a part of the negotiations with GE, it might have been enough of a complicating factor to prevent any agreement from being reached (Olson 2000).

CHAPTER 3. Theory of Public Participation

3.1 Definitions of Community

Literature on the topic of outreach often uses the terms community, stakeholders, and public without differentiation of these terms. In this work, the “community” refers to the individuals, groups, or small business owners affected by the contamination, either directly or indirectly. The term “stakeholders” refers to the full range of individuals and groups with interests related to the contaminated site, which could be health, welfare, economic, and other interests. These include individuals who regulate, oversee, remediate and revitalize the site, developers, and those concerned with the environment and the welfare of future generations. The “public” refers to a broader collection of individuals and groups, including those not necessarily directly or indirectly affected by the contamination.

3.2 Formation of a “New” Community

In *Contaminated Communities*, Michael Edelstein defines the term “contaminated communities” as “any residential area located within the identified boundaries for a known exposure to some form of pollution” (p.6). He discusses the shared bond that develops between residents regardless of race, politics, and socioeconomic class. This bond results from the initial trauma and dread that only grows as residents learn more information about potential hazards of the contaminants. He illustrates this bond in a case study of Legler, New Jersey. The residents in suburban Legler preferred their privacy and interacted on a very limited basis with their neighbors until severe water pollution was uncovered. Afterwards, a new sense of community and friendship grew between the citizens as they felt a need to share their concerns and experiences with others who could provide experiential understanding. Residents spoke of friends living outside the area no longer wanting to visit because they feared exposure. These experiences of abandonment or rejection amplified the new need to be social with their neighbors (Edelstein 1988).

Published in 1988, the book presented a revolutionary analysis of the psychological impacts of living in an area with known toxic exposure. He lists five psychological effects resulting in changes in residents' outlook on life:

1. "A reassessment of the assumption of good health.
 2. A shift to pessimistic expectations about the future, resulting from victims' perceived loss of control over forces that affect them.
 3. A changed perspective on environment; it is now uncertain and potentially harmful.
 4. An inversion of the sense of home involving a betrayal of place. What was formerly the bastion of family security is now a place of danger. Having chosen to live there, the person is now deprived of the choice of leaving.
 5. A loss of the naïve sense of trust and goodwill accorded to others in general; specifically, a lost belief that government acts to protect those in danger."
- (Edelstein 1988, pp. 48-9)

These changes may occur without the individual recognizing the shift, resulting in depression and avoidance. They certainly affect citizens' ability to organize for activism or participate in structured mediations or public meetings (Edelstein 1988).

3.3 Contamination Timeline

The Ashford/Rest model proposes a general structured timetable for the possible stages in contaminated community's case histories. The timetable begins with initial recognition of problems at the site and early history, followed by the decision to study or investigate the site. These are interesting aspects of the Pittsfield site history, important in understanding the public participation. However, this thesis will not discuss several points on the timetable, including the choice of investigators, the design of the study/investigation, identification of health endpoints of concern and contamination/exposures of concern, the conduct of the study (sampling, measurements), or the evaluation/presentation of results because the public was not involved significantly in these aspects of the case. The government agencies, both state and federal, made

these decisions on behalf of the public, acting as a trustee. The next stages in the Ashford/Rest timetable are communication of the results to the community, the decision to act, and in cases of remediation,¹¹ the choice of the remediation contractor, and the identification, evaluation, and choice of options for remediating the contaminated site.¹² Finally, the timetable ends with the stages involved in the actual site remediation and the concurrent and post-remediation monitoring of the site and the monitoring of health indicators in the community (Ashford/Rest 1999).

Contaminated Communities provides a timeline for the toxification of a community. After pollution has originated in a community, an incubation period usually follows before the contaminants are detected. After discovery follows a period of shock, and gradually some level of acceptance of the contamination. Many individuals become active in trying to understand the situation and future options. However, recovery to normal life is “difficult if not impossible.” Many complications and uncertainties prevent the victims from achieving closure, even if they move from the site (Edelstein 1988).

3.4 Government Involvement

Chess, Hance, and Sandman’s 1988 *Short Guide for Government Risk Communication* introduces a hierarchy for public participation in risk examination. The lowest tier is government acting without communicating with citizens, closely followed by a “government talks, citizens listen” approach, as with press releases or newsletters. The next two levels of participation are separated by the intentions of the agency: government asks citizens for input and either would prefer not to listen or intends to listen. The distinction between the two often can be determined by the formality of the meetings, the quality of communication between the two groups, and whether or not there is follow-up or on-going dialogue. The book refers to the

¹¹ The Ashford/Rest model provides a scenario for no further action, further study, and remediation. In the case of Pittsfield, remediation was necessary.

¹² Choosing the remediation involves identification of options, evaluation of options in terms of residual contamination/health risk, followed by choosing an option or combination of options (Ashford/Rest 1999). The Pittsfield public was completely left out of this negotiation process because of the terms agreed upon between GE and the government agencies (Olson 2000). However, the public was able to participate through various mechanisms, in conversations with their elected officials, and during the public comment period (See Section 4.4).

highest relationship as “power-sharing,” which means the government agencies and the citizens solve problems together. The Pittsfield case falls shy of this category, despite exhibiting some of the power-sharing characteristics: funding of citizen groups to hire technical consultants and meetings called jointly by government and citizen groups. However, citizens in Pittsfield were not a part of the remediation agreement and do not participate in monitoring or implementation projects. The highest level of participation occurs when citizens act without communicating with the government, for example in the case of a volunteer fire department (Chess 1988). This level of public participation is not feasible when dealing with Superfund sites. Citizens need the financial support and authority of the government to pursue a cleanup with a responsible party.

The manual also presents aspects necessary to foster a trusting relationship between the agencies and the public.

1. “Be aware of the factors which inspire trust.
2. Pay attention to process.
3. Explain agency procedures.
4. Be forthcoming with information and involve the public from the outset
5. Focus on building trust as well as generating good scientific data.
6. Follow up.
7. Make only promises you are sure you can keep.
8. Provide information that meets people’s needs.
9. Get the facts straight.
10. Try to coordinate with other agencies.
11. Make sure you coordinate within your agency.
12. Don’t give mixed messages.
13. *Listen* to what various groups are telling you.
14. Enlist the help of organizations that have credibility with communities.
15. Avoid “closed” meetings.” (Chess 1988, pp. 7-9)

Again, involving the community in the process of finding a solution is a key factor in establishing credibility and trust. In the Pittsfield case, GE forced the government agencies to

choose between a flawed Superfund process and a negotiation that GE required to be closed to the public. Choosing to negotiate forced the EPA and other agencies to start off at a disadvantaged position with the community. To fight that uphill battle, EPA did exhibit as much as possible the other directives listed by Chess et al. for situations in which the agency is dealing with a situation in which trust is low: consider how the trust was violated, acknowledge the lack of trust, specify ways in which the agency plans to rebuild trust, ask those who distrust the agency what it would take until *they* feel you are trustworthy, respond on a personal level when appropriate, share information as soon as possible, and finally, be patient (Chess 1988). This type of trust-building leadership exhibited by EPA in Pittsfield did win the trust of the majority of the public.

Hance, Chess, and Sandman's 1990 *Industry Risk Communication Manual* lists similar trust-building mechanisms, and presents a parallel hierarchy of public participation in communicating with industry. It also outlines reasons behind community outrage, such as the unfairness of the situation, familiar risks versus exotic risks, and open processes versus closed processes (Hance 1990). General Electric has not adopted an open approach in Pittsfield. At times their representatives have even vilified themselves by remaining silent or aloof about the contamination (Gray 2000).

3.5 Theories of Community Involvement

In *Stakeholder Views of Superfund Sites* by Mary English et al., English comments on how the responsible party's economic relationship to the community affects public participation. If the polluter is an important part of the local economy, as General Electric was for many years, the community is often skeptical of the need for a Superfund cleanup. Typically economic concerns of a cleanup dominate within the community, considering that many members of the community benefit from the financial success of the polluter, whether they are on direct payroll or profit from business brought in by the polluter or direct business with the polluter. Furthermore, English states that in cases where the responsible party is important to the economy, the community is often concerned with stigmatization from the cleanup and any resulting negative impacts on future economic development. These concerns lead to a community eager to start a

cleanup and “get it over with,” instead of focusing on the thoroughness of the cleanup (English 1993).

3.6 Evolution of Community Groups

The interaction between government agencies and the public in contaminated communities can be compared to the interactions of different government agencies with the poor. In his writings about the anti-poverty movement, Neil Gilbert points out that, “One reason the poor have little influence upon social welfare institutions is that, unlike most areas of consumption, here they do not have the alternative of taking their business elsewhere.” He comments that a duplication of the welfare system would be paradoxical, and that those in need of the services are frequently overwhelmed with life pressures, placing them in a vulnerable bargaining position (Gilbert 1970). Interactions in contaminated communities are similar. The individuals affected by the pollution almost always lack the financial capacity to cleanup the pollution themselves, and therefore rely on government to act as a trustee on their behalf. The government subsidizes industrial activity by using monies such as Superfund to cleanup hazardous sites because the agencies often fail to force the responsible parties to pay for it themselves. The people most affected by the contamination have little input on how much contamination gets cleaned up, and as in the Pittsfield case, where the contaminated material is deposited.

CHAPTER 4. Analysis of the Pittsfield Site Using the Ashford/Rest Model

In this analysis, public participation refers to the broadest level of inclusion in decisions affecting the community. The public refers to the affected community and all stakeholders involved with the contamination. The community is defined to be local residents and small business owners. The contaminated community refers to those residents and small business owners who are being affected by the pollution, to their person through exposure pathways or contamination of their property. The term stakeholders refers to those who have a legitimate interest in the issues that impending decisions regarding the cleanup will affect, such as a canoe club on a contaminated river. Perhaps their property is clean and the club does not own the river, but the viability of their club depends on the health and the club users' perception of the river.

There are three types of public involvement: communication, building skills, and participation in the process. The first, communication with the public, consists of several types of communication. The communication can be one-way from the government agencies to the public, through press releases, newsletters, Internet websites, or information sessions. The communication can be one-way from the public to the agencies, through public comment periods and at public hearings. Lastly, the agencies and the public can have two-way communication, either face-to-face at meetings or workshops, or through responses written to letters submitted during public comment periods. Skill building involves technical short courses for the public, technical assistance grants, or providing experts dedicated to working with the public. Active participation results when there is two-way communication, adequate skill building in the community, and a commitment from the agencies to work with the public, as a mediator, to help the public reach the solution it collectively desires (Ashford/Rest 1999).

The Ashford/Rest model differentiates government's role as a trustee for the public or as a facilitator to reach an agreement within the public. The agreement reached within the public can be utilitarian or communitarian. A communitarian consensus reflects all viewpoints present within the community. This type of consensus is more difficult to reach, because it is

challenging and time consuming to draw out the different viewpoints from a variety of groups within a community. A utilitarian consensus is reached between the self-motivated community members who took advantage of the available participation mechanisms. With this latter consensus building process, some viewpoints that exist within the community are never revealed, and therefore are likely never considered in the decisions reached. The following table, extracted from the Ashford/Rest model, describes the types of decisions made under each combination of these conditions.

Government's Role	Utilitarian	Communitarian
As a Trustee for the Community	Decision made by government - reflects a compromise of different visible community interests	Decision made by government - reflects a normative consensus of community interests
As a Facilitator of Consensus within the Community	Compromise or consensus reached by visibly participating community members	Normative consensus reached by community, possibly expanded to interests of all members

Table 4.1: Examining the decisions resulting from the two possibilities for government involvement and the consensus-building process. (Ashford/Rest 1999, p. VII-14.)

The most important factors for successful public participation that can be distilled from the Ashford/Rest case studies are as follows:

1. Agency clarity, commitment, and accountability to the community.
2. Direct interaction between the agency and the community and among the various participants/stakeholders.
3. Top-level commitment within the agency to the project, and little if any turnover among the public servants working for the community.
4. Several different mechanisms for public participation.
5. Broad representation and diversity of views throughout the process.

6. Trust-building and mutual respect between members of the agency, community, and other stakeholder groups.
7. A broad view in addressing the community's needs.

The Pittsfield case analysis will address whether or not these tenets were reflected in the public participation. The formation of several Pittsfield community groups to address different specific tasks suggests that there were numbers of people who felt that if they did not get involved, a serious error or omission would be made by the agencies handling the case. Perhaps the agencies were not spending enough time on a specific issue important to the group, or perhaps the active individuals did not trust the agencies to do their job well or to act as a trustee of the community. They must have felt the issues were so personally important that they were willing to spend their free time, away from their families, to work together on these issues themselves, rather than trust the agencies to make the decisions without input.

4.1 Trustee versus Mediator

At General Electric's insistence, there was no involvement of the public in the negotiations. Not only were members of the public excluded from attending all meetings of the negotiators, all communications were kept confidential by legal agreement. This legal document can be found in Appendix S of the Consent Decree. It states that "the parties, their representatives, and the mediator(s) may not disclose information regarding the negotiations, including settlement terms, proposals, offers, or other written or oral statements made during the negotiations, to third parties, unless all parties otherwise agree. The negotiations shall be treated as compromise negotiations under Rule 408 of the Federal Rules of Evidence and applicable state rules of evidence." The agreement prohibits mediators from appearing in court either by subpoena or voluntarily (Consent Decree 2000). These terms accepted by the negotiating parties called for the government agencies involved in the negotiation to act as trustees of the public.

EPA was the lead agency of the several agencies involved in the negotiations (See Section 1.3). In order to facilitate acting as a trustee for the public, the agency focused on a limited kind of participation, that of getting the community's views. EPA utilized several public participation

mechanisms, such as open meetings, letters, press releases to the local newspaper, etc. The agency gave attention to different ways of participation and scheduling events at varying times to accommodate different schedules, including making home visits to speak with residents in their own homes and answer questions (Olson 2000).

In opting to negotiate with GE, the agency accepted the terms to conduct the remediation negotiations behind closed doors. Once the court ratified the Consent Decree, the remediation plans for the GE site, the fill properties, the first two miles of river downriver from the GE plant site, Silver Lake, and Woods Pond were nonnegotiable. The terms were settled, barring new discoveries of more contamination. The only major remediation issue left to resolve with General Electric was the rest of the Housatonic River (south of the two-mile stretch throughout Connecticut). Though many members of the public were satisfied with the Consent Decree, motions to intervene were filed by some groups, indicating dissent in the community. Additionally, even if many groups believed the Consent Decree was the best remediation commitment they could have gotten, they did not necessarily approve of the process. People in the community groups stated that they would have preferred a more transparent negotiating process (Fletcher 2001).

After the remediation is completed, the NRD collected from GE will be spent to restore the river and its banks to a more natural state. Instead of leaving the NRDC, made up of representatives from government agencies (See Section 1.4), to act as trustees on behalf of the public, a community group had already been formed to create plans for the funding from the NRD. The Housatonic River Restoration, Inc. (HRR) formed in 1997 to begin a more communitarian consensus process, collected input on a restoration plan. *The Housatonic River Restoration Plan*, developed by the “People of Berkshire County” and published in 1999, incorporates the views of over 1,000 local residents. The report was compiled over the course of two years, and describes a long-term restoration plan to reconnect the local community with the river in a more participatory way. The plan focuses on the *involvement* of the members of the community themselves:

“Years from now, no distant planner in Washington or Boston will comb the Housatonic’s banks for rare plants, lead a fourth-grade class to troll for insects in the current, fish its waters, canoe its length, or sit quietly on a hillside hearing it move below. We whose many voices speak as one in these pages will do those things. The restoration plan for the river will not work unless we are an integral part of it - equal partners with the agencies administering the funds in planning and securing the river’s fate. If we are not, we will have bought only a little time instead of an entire future.” (*The Housatonic River Restoration Plan*, 1999, p.2)

The passage makes two key points. It communicates to the participants who contributed to the plan and the other residents reading the passage that they have a responsibility to pay attention to the impacts on the river and participate in its care. Secondly, it speaks of the desire of the community to participate actively with government agencies in decision-making regarding the river, as opposed to leaving it to the government to act as a trustee on behalf of the community. Rachel Fletcher, Executive Director of HRR, states that she did not want to “wait until it was too late” to get involved in the decisions on the distribution of the funds. This was a tremendous effort undertaken by HRR to visit and interact with such a large amount of people in less than two years on the river restoration plan. Over 1,000 people were willing to participate. This level of participation, without the involvement of the Natural Resource Damages Council (NRDC), indicates a strong desire by the people of the Berkshires to act on their own behalf. HRR played the role of the facilitator, instead of leaving it to the agencies to facilitate a consensus within the public. HRR preemptively questioned the commitment and ability of the NRDC to reach a communitarian consensus; something the initiators of HRR believed essential to sustain conservation and protection of the river. At the time of this writing, the NRDC has begun to meet but has not officially responded to the HRR proposal (CCC 2000).

4.2 Key Issue and Conflicts

Key issues and conflicts in the Pittsfield case were as follows: transparency of the decision-making process, the remediation of the resident fill properties, who would bear the liability of the

contamination in the future, potential negative effects on the economy, the contaminated schoolyard, Hill 78 (a PCB dumpsite across from an elementary school), cleanup for the river, and the participation of Connecticut stakeholders. The government agencies were unable to secure the public's interest on all of these items, but had informally surveyed individuals in door-to-door visits and at public meetings during the negotiations to get a sense of the priorities of the residents. The agencies were willing to contribute supplementary funds to help ensure the safety of the community, rather than attempt to fight GE in the courts and potentially slow down the cleanup.

Transparency of the Process

General Electric refused to negotiate unless members of the community were left out of the process. Although the government agencies worked to make the process as transparent as possible, there were and are aspects of the negotiation that will never be accessible to the public. Community stakeholders were frustrated with the lack of information. The public viewed the process as "secret," which damaged the credibility of the agencies, but the public felt it had no other choice but to accept the agencies as a trustee of their best interests, for better or for worse.

Although Mayor Doyle and the President of the City Council, Thomas Hickey, represented the city in the negotiations and are residents of the area, many residents were concerned about the lack of a non-political community member. A key point in *Public Participation in Contaminated Communities* by Nicholas Ashford and Kathleen Rest is that stakeholder involvement is not equivalent to public participation. The negotiation process in Pittsfield was not open to the public in any way. Federal and State agencies, GE representatives, and the two local officials were involved. EPA was the chief agency working with the public on all issues except resident fill properties, which MA DEP handled.

The Fill Properties and Future Liability

According to members of Get R.E.A.L. Pittsfield, it was unfortunate that MA DEP headed up the remediation of the resident fill properties. Residents preferred the openness of the talented EPA

members on the case, and felt they faced more bureaucracy with MA DEP. During the negotiations, MA DEP gave the residents the impression that discussions on the fill properties were not part of their interest and not a part of the negotiation. The agencies were permitted by a consensus of the negotiating parties to inform the public which topics were going to be covered in the negotiations, but residents were not informed that the fill properties were being discussed. The fill property cleanup was negotiated between GE and MA DEP outside of the official negotiations. However, Appendix T of the Consent Decree lists all the fill properties that had been discovered at that time and binds the Agencies in a covenant with GE not to sue. On page 221 of the Consent Decree, it states that GE is responsible for reimbursement to EPA for any costs associated with the resident fill properties listed in Appendix T until the properties pose an acceptable level of risk to human health and the environment. The covenant not to sue agreement (CNS) regarding these properties begins on page 306, and became effective for each property upon a written approval to the LSP's response action outcome (RAO) from the MA DEP. The CNS states the following:

“In consideration of the actions that will be performed and the payments that will be made by the Settling Defendant (GE) under the terms of the Consent Decree... the United States, on behalf of EPA, NOAA, DOI, ACOE, DOD, ATSDR, and any other agency which may have authority to administer the statutes cited in this Paragraph, covenants not to sue or to take administrative action against Settling Defendant pursuant to... (various sections of CERCLA, RCRA, TSCA, and the CWA) for releases or threatened releases of Waste Materials at the site, where such Waste Materials originated at the GE Plant Area, for performance of the Work, or for Designated Fill Properties.” (Consent Decree 2000, p. 306)

The CNS is dependent on GE fulfilling the specified remedial and/or removal actions satisfactorily. The Consent Decree also states that if more GE-related contamination is discovered on the fill properties, GE is liable to fund a response action that will restore safety to human health and the environment. According to the owners of those properties, it was disconcerting to see their addresses listed without having been a part of the negotiations. They

were not signatories to the document, and yet they felt as though their rights had been signed away (Orsi 2001).

Community participation was crucial in the discovery of the fill properties. The many former GE employees residing in Pittsfield became a living record of where contaminated fill had been dumped. The company did not keep track of the distribution of the free fill, but individuals remembered seeing trucks or had even driven trucks themselves. Retirees were concerned that if they came forward with any information that might hurt GE, they might lose their pensions. A member of HRI proposed setting up a toll free phone number to receive anonymous tips. MA DEP adopted the idea and received over 300 phone calls in three to four months (Gray 2001). The calls were overall very accurate in detailing off-site contamination not previously indicated by GE. In three years, 289 properties were investigated and 143 were remediated (Olson 2001).

Brownfields Redevelopment And Economic Aid

The Pittsfield Economic Development Authority (PEDA) was concerned with the stigma that could cast a shadow on the economic livelihood of the region if EPA decided to list the GE Pittsfield site as a Superfund site. PEDA developed a Pittsfield economic objective, "to utilize the former GE facility for new development thus preserving undisturbed "greenfields" (EPA 2001). A landmark agreement was reached between GE and the agencies in the Consent Decree, allowing the GE plant to be available for reuse after the remediation was complete, instead of leaving 245 acres of vacant land. (Normally GE does not allow reuse of their closed plants because of liability concerns.) This concession on the part of GE allowed PEDA to incorporate the former plant site into a blueprint for the economic revitalization of Pittsfield and Berkshire County. GE, the City of Pittsfield, and the Pittsfield Economic Development Authority (PEDA) will implement an economic development package including \$60 million from GE. Under this agreement, GE will use \$50 million to cleanup its plant site to agreed upon Consent Decree standards (Item I.C.1), demolish several buildings, provide some funding for building new buildings, and transfer portions of the property to PEDA for economic redevelopment. In addition, GE will provide \$10 million in direct economic aid to the City of Pittsfield (EPA 2001).

The Contaminated Allendale Schoolyard

The Pittsfield community was extremely concerned with the contamination found in the Allendale Elementary School. At the time of the school's construction in 1950, GE entered into an agreement under which GE allowed the City to remove soil Hill 78 to use as fill material on the school site. The MA DEP conducted soil testing in early 1990 and found detectable levels of PCBs in the soil. Later that year, the agency requested that GE determine the extent of the contamination on the property. GE capped the hot spots on the property in 1991. The land was included in the site that EPA proposed for inclusion on the NPL in September 1997. While negotiations were ongoing, one of the topics of most concern to the community was the schoolyard. The site was also included when the negotiations led to an agreement in October 1998. In late 1999, GE removed 41,000 cubic yards of contaminated soil from the school's backyard, replacing most of it onto Hill 78. When the property was restored, GE installed new recreational equipment and athletic facilities, including a running/walking track (EPA 2001).

Hill 78

Hill 78 is a consolidation site for toxic materials and soil collected from removal actions on the GE site and other contaminated areas in the town. The Hill 78 site had been a previous GE dumping ground for approximately 60 years. It is located across the street from the Allendale Elementary School. Citizens wanted to see Hill 78 removed and treated. The Consent Decree designates Hill 78 as a consolidation area, with some restrictions. GE may elect to deposit contaminated soil, which has been unearthed during the remediation process, on top of Hill 78, but barrels of oil are not allowed on the dumping site. The community groups have not used any of the technical assistance grant money to hire a professional to evaluate the risks of this area. EPA has monitored around Hill 78 to ensure that PCBs are not migrating from the site. EPA feels there is no technical merit to the perception of high risk among some members of the community. A survey of the parents of the students at Allendale School, conducted by EPA, indicated that the large majority of these parents trusted EPA's risk analysis of the site (Olson 2001).

The River Cleanup

The Consent Decree divides the river into three segments: the first half-mile, the next one and one-half miles, and the rest of the river. The Consent Decree also includes agreements reached on the former oxbows, which were created from the original river. GE agreed in the Consent Decree to cleanup many of the contaminated oxbows and first half-mile of the Housatonic, which winds along the plant property and slightly downriver. EPA and General Electric will share the expense of the next 1.5 miles of the river.¹³ The Consent Decree refers to the rest of the river, but calls for further testing.

During the late 1930's and early 1940's, the City requested that the Army Corps of Engineers (ACOE) straighten the Pittsfield stretch of the river. This process isolated former bends in the river, creating multiple oxbows. ACOE filled in the swampy oxbows with various materials, including industrial wastes. GE agreed to cleanup many of these oxbows, and the EPA will fund the remainder. GE began remediating the first half-mile of the river in October 1999. Upon successful completion of the removal action, the estimated average concentration of PCBs will be as follows: 0.16 ppm in the surface sediments, 7.6 ppm in the top foot of riverbank soils, and 11 ppm in the one to three foot interval of riverbank soils (EPA 2001). For comparison, acceptable levels published by the ATSDR for PCBs in soil are as follows: 2ppm in residential or agricultural areas, 5 ppm in recreational areas, and 20ppm in commercial/industrial areas (ATSDR 2001). EPA is studying the rest of river, modeling the hydrodynamics, sediment transport, and PCB fate and bioaccumulation in the river. After the reports have been completed and peer reviewed, GE will prepare a Supplemental RCRA Facility Investigation Report, propose cleanup goals, and evaluate cleanup options (including a no action scenario). After public comment, EPA will submit a response action plan to GE, which GE has the right under the Consent Decree to appeal. GE will then be responsible for implementing the final solution for the rest of the river (EPA 2001).

¹³ Estimates indicate that GE will incur \$33 million of the costs and EPA will use Superfund to pay the remaining costs, which is expected to be \$12 million.

4.3 Formal Mechanisms for Public Participation

There are several types of mechanisms for public participation, and these can be divided into three categories: communication with and within the community, building skills and capability within the community, and community participation with government agencies in the process (Ashford/Rest 1999). The following sections list and explain several participation mechanisms, separated by type. In each category, each mechanism is presented in the way government agencies would be *ideally* use the mechanism to achieve that type of participation.

Vehicles/Mechanisms for Communication

- Community training for agency and citizen participation
- On-site agency representative
- Public meetings
- Speakers bureau
- Educational Workshops
- Poster sessions
- Community surveys or interviews
- Information repositories
- Public comment periods
- Internet websites
- Newsletters / mailings / fact sheets
- Press releases

Community training for agency and citizen participation facilitates successful communication in any mechanism, and can reflect a serious commitment of the agency funding the training to participation of the community. Communication mechanisms between an agency and a community can work in one of three ways: one-way communication from the agency to the community, one-way from the community to the agency, or two-way communication between

the agency and the community. Communication mechanisms can also facilitate communication *within* the community. Public meetings and public comment periods can inspire two-way communication. The latter often involves a delay in response from the agency. In order to be successful, the agency representatives must listen to the community. These meetings are often more productive if the public is prepared with guidance for asking questions. The agency could facilitate this by providing speakers from other contaminated communities, which are further along the timeline, or a list of potential concerns and fact sheets. Attendance of an on-site agency representative encourages accountability of the agency and increases accessibility for the public.

Poster sessions can be one or two-way communication mechanisms. If the posters are on display but not attended to by a representative of the author, it is one-way communication. If an individual is there to answer questions, it is still one-way, but of a higher quality. Better yet, this can be an opportunity to have representatives to record and listen to public comment in response to the presented information. Information repositories, Internet websites, newsletters, mailings, fact sheets, and press releases represent one-way communication from the agency to the community. Community surveys or interviews usually represent one-way communication from the community to the agency; however, interviews can include a question and answer component.

Vehicles/Mechanisms for Skill and Capacity Building

- Technical assistance grants
- Short technical courses
- Leadership development courses
- Training in coping with and responding to environmental problems
- Officials dedicated to helping citizens (designated information source)
- The development of guidance protocols to aid the asking of questions
- Community driven self-help groups
- Participation as a learning mechanism
- Legal advisor

The theory behind mechanisms for skill and capacity building is to build a common understanding of the risks due to the contamination, understanding of the technical solutions proposed, and to build the ability of the community to participate in the process. CERCLA reflects the importance of these mechanisms, incorporating \$50,000 Superfund Technical Assistance Grants into the options for helping contaminated communities. These grants are typically awarded to a single community group, with the hope that the group will use the grant to purchase technical expertise for the good of the entire community (Olson 2001). Agencies can also elect to provide short technical courses, taught by agency experts or outside experts. These courses are designed to provide enough information (to those who elect to attend) to enable the public to understand their situation and the solutions proposed. They can also be a useful question and answer forum for the community to address technical and scientific questions, analogous to participation as a learning mechanism. To facilitate these sessions and regular community meetings, agencies can provide guidance protocols to aid the asking of questions. Agency representatives dedicated to remain on site as a resource to community members can also provide technical expertise. This is perhaps not the best use of their time, as might be able to help more people by holding a short course; however, meeting one-on-one with an agency official can provide a more comfortable environment for individuals to express their true frustrations and concerns. Non-technical skill and capacity mechanisms include leadership development courses and training in coping with and responding to environmental problems, or the funding of community driven self-help groups (Ashford/Rest 1999).

These mechanisms are designed to empower the citizens, setting into motion their own ideas for reaching a just solution. When the government acts as a trustee, these mechanisms serve to provide a check and balance system, as well as help create more meaningful opportunities for public involvement. When the government acts as a mediator between the contaminated community and the potentially responsible party, these mechanisms are essential. The government cannot expect the community to have the expertise needed to make technical and risk-based decisions. The agencies have a responsibility to assure that a just resolution is reached.

Vehicles/Mechanisms for Participation in the Process

- Official Citizen Advisory Groups (CAP's, CAB's, etc.)
- Multi-stakeholder committees/panels/workshops
- Utilization of citizen experts
- Designated coordinators for interagency coordination, and subsequent communication with community
- On-going vehicle to have community voice new concerns and facilitate continued agency responsiveness

Citizen Advisory Groups¹⁴ (CAG) are comprised of representatives from every group within the community that is affected by the contamination, including residents as well as other stakeholders. These local individuals meet regularly with the government officials who are overseeing the contamination remedy. The CAG can have involvement ranging from acting as a sounding board to a decision-making body. CAG's are similar to multi-stakeholder committees, panels, or workshops, which can have a less comprehensive representation of the community and, in the case of panels or workshops, may not meet on a regular basis. Government agencies can also choose to involve citizen experts as advisors, lending assistance in assessing the contamination and evaluating the remedy options.

4.4 Public Participation Mechanisms Utilized in Pittsfield

As discussed above, government can play one of two roles in their interaction with contaminated communities: government can act as a trustee of the public, and secure the public interest on its behalf, or government can act as a mediator, and facilitate consensus within the community and an agreement with the potentially responsible party. In the case of Pittsfield, because the government chose to negotiate a settlement instead of suing GE with CERCLA authority, the

agencies chose to act as a trustee for the public. EPA was the agency that handled the majority of the public participation efforts.

Communication Mechanisms Used by the Agency

The EPA utilized several public participation mechanisms to facilitate communication between the public and the agency. The table below lists the mechanisms used by the agency, and the type of communication that resulted. The meetings, hotline, information repositories, public comment periods, and websites were and are available to any individual. The newspaper used by EPA for press releases was the Pittsfield local paper, *The Berkshire Eagle*. Without purchasing the newspaper, anyone can access the paper in the public library. Only local residents received mailings. Anyone could call EPA and arrange a home visit with Bryan Olson or Angela Bonarrigo from EPA, but typical residents on contaminated fill properties were the only individuals who utilized this mechanism.

Mechanisms / Activities	Type of Communication
Public meetings or discussions	2-way
Public comment period	2-way
House calls by the agency	2-way
<i>Anonymous contamination hotline</i>	<i>Community to Agency</i>
<i>Community surveys / interviews</i>	<i>Community to Agency</i>
Press releases	Agency to Community
Mailings / fact sheets / newsletters	Agency to Community
Internet website	Agency to Community
Information repositories	Agency to Community

Table 4.2: Types of Government / Community Communication Mechanisms

¹⁴ A Citizen Advisory Group (CAG) can go by many different names: Citizen Advisory Panel (CAP), Citizen Advisory Board (CAB), or, as in Pittsfield, Citizen’s Coordinating Council (CCC).

Capacity and Skill Building Mechanisms Used by the Agency

The EPA awarded a \$50,000 CERCLA Technical Assistance Grant to the most vocal community group, the Housatonic River Initiative (HRI). HRI has been actively involved in motivating a river cleanup since 1991, and had been existence longer than any other community group that had formed specifically to address the GE contamination problem (Gray 2001). Housatonic River Restoration, Inc. (HRR) also received a grant from EPA. Instead of a technical grant, HRR received funding to facilitate the development of the community restoration and stewardship plan for the Housatonic (Fletcher 2001). MA DEP awarded a \$10,000 technical assistance grant to Get R.E.A.L. Pittsfield. Get R.E.A.L. elected to use the funds to hire a Licensed Site Professional to help the residents on fill properties interpret documents and to create a risk analysis protocol for the residents. Get R.E.A.L. also received a grant from EPA to work with a communications firm in Boston, in order to enable the community to “tell their story” to other contaminated communities around the nation (Orsi 2001).

Public Participation Mechanisms Used by the Agency

EPA had specified in the Consent Decree that it would like more public involvement with the case. A provision establishing a citizen advisory panel, the Citizen’s Coordinating Council, was written into the decree. According to DeVillars, "strong community partnerships are key to a successful environmental and economic recovery." EPA based the citizen advisory panel (CAP) on the agency's community involvement model developed for the cleanup of the Massachusetts

Agenda Outline for Monthly CCC Meetings

1. Welcome and Introductions
2. Review of proposed agenda and Notes from the last meeting
3. Changes to the agenda and Corrections to the notes
4. Educational presentation
5. Discussion and questions
6. Updates from: GE, EPA, DEP, and NRDC
7. Next steps
8. Action item confirmations

Military Reservation on Cape Cod. EPA hoped that the panel would be comprised of a group of knowledgeable, committed Berkshire County citizens to ensure that citizen concerns would be fully incorporated into the key environmental decisions that will be made by the agency. The board is

comprised of business, environmental, political and community leaders from Pittsfield, South Berkshire County, and Connecticut. "Our effort must be a team effort," said DeVillars. "This will help ensure that it is" (EPA 2001).

The purposes of the CCC, as stated in the Consent Decree, are as follows:

- 1.) To serve as a vehicle for community involvement in the implementation of the settlement agreement between GE and the government.
- 2.) To be a mechanism to ensure that all parties to the negotiated agreement are able to honor their commitment to listen to, to learn from, and incorporate the ideas and concerns of the community to the greatest extent possible.
- 3.) To enable representatives of diverse interests in the region to communicate with each other, and to provide community input and structured feedback to GE and the government (Consent Decree 2000).

Harry Manasewich, from the Commonwealth of Massachusetts Office of Dispute Resolution, runs the CCC meetings once a month. The meetings have a regular agenda that allows for both flexibility and predictability. Representatives from different stakeholder groups sit around a large table; others make up the "audience," seated in folding chairs facing the table. At any time during the meeting, members from the audience can interrupt with questions. The meeting is used as an educational forum as well as for two-way communication. An education presentation (primarily from government agencies) on a topic requested by the community members is given at each meeting. Members from GE and all the government agencies take turns sharing an update with the entire council and answering questions. Representatives from HRI, HRR, Get R.E.A.L., and Connecticut's H.E.A.L. regularly attend the CCC meetings.

In reference to the fill properties, the MA DEP held a public comment period and responded in the form of a letter to a summary of the questions the agency received on various topics (See Appendix C). The agency established a contamination hotline at the suggestion of a resident, to facilitate the anonymous reporting of off-site contamination areas in Pittsfield. The agency received over 300 calls in less than four months (Gray 2001). Residents requested an

anonymous reporting system, despite no substantiation of their fears of losing their GE pensions (Olson 2001).

Public Participation Mechanisms Used by the Community Groups

Community Group	Received Grant(s) From Government	Collaborated with other Community Groups	Part of the Citizen's Coordinating Council	Held Public Educational Events	Organized Protests	Filed Lawsuits Vs. GE	Filed Motion to Intervene with Consent Decree
Housatonic River Initiative (HRI)	X	X	X		X		X
Housatonic River Restoration (HRR)	X	X	X	X			
Get R.E.A.L.	X	X	X	X	X	X	
Citizens for PCB Removal		X	X		X		
HEAL (CT-based)		X					X

Table 4.1 Public participation mechanisms used by the community groups.

Communication Mechanisms Used by the Community Groups

Collaboration between community groups has been ubiquitous throughout. The first group to form, HRI, was instrumental in providing the other groups with basic information on PCBs, site history, and a record of community involvement to date. The group has videotaped every single public event related to the contamination, including the current CCC meetings. As the other four groups listed in Table 4.1 formed in the 1990's, each one would have a meeting or a series of meetings with representatives from HRI who would provide the other groups with considerable information (Gray 2001).

All the groups send at least one representative to the CCC meetings, including H.E.A.L. However, the Connecticut group literally does not have a seat at the table; H.E.A.L. members sit in the folding chairs reserved for the general public. Their representatives still manage to be active participants in the meetings. The other four community groups in Table 4.1 are officially part of the CCC (Manasewich 2001).

The Berkshire Eagle, the local newspaper in Pittsfield, was an instrumental communication tool used by all parties. Until the publication of a near comprehensive list of local businesses that supported the Consent Decree, the paper had played more of an advocacy role. After that issue, the paper changed its tone and began to almost exclusively highlight the positive aspects of the cleanup and economic redevelopment (Gray 2001).

Capacity and Skill Building Mechanisms Used by the Community Groups

In 1998, HRI was awarded a CERCLA technical assistance grant from EPA of \$50,000. The group spent half the money on an epidemiological study of the city, a few thousand to hire a Licensed Site Professional (LSP) to comment on EPA's remediation plan for the Housatonic, and plans to spend the last \$22,000 on modeling plans for the river (Gray 2001). The MA DEP awarded Get R.E.A.L. a \$10,000 technical assistance grant, which the group used to hire a LSP. Get R.E.A.L. applied for and was awarded a second grant from another state agency, used to fund work with a communications firm in Boston so the residents of the fill properties could tell

their story. The group had learned a considerable amount from talking to people in Woburn, Massachusetts and in Connecticut who had lived on contaminated properties and gone through remediations. Get R.E.A.L. hopes their stories will help others in the future - those who discover that they too are living on polluted property (Orsi 2001). HRR also applied for and received three government grants, including a \$16,000 grant from EPA. The second grant came from the state, a two-year Massachusetts Environmental Trust Grant. Massachusetts EOEA granted the group money from a "Communities Connected by Water" fund to finance a student conference. These grants were used for consensus building mechanisms instead of technical assistance (Fletcher 2001).

HRR held over sixty public meetings in different locations. Their approach involved going to talk to people along the river on their own properties to maximize participation. The group used the third grant to hold a regional student conference, intended to facilitate brainstorming ideas for restoration of the river and its stewardship. Over 250 students from first grade level to college attended, along with over 150 others. HRR published a comprehensive restoration plan in 1999, detailing the strategies created from the input of over 1,000 people. According to Rachel Fletcher, HRR's executive director, the group strove for a communitarian consensus. This was partly because the group felt that restoration was the one issue everyone could agree on. They wanted to take advantage of an opportunity to bring people together on at least one issue in the divisive strife (Fletcher 2001).

4.5 Criteria for Evaluation

The Ashford/Rest model discusses several vehicles for public participation, focusing on those that create broad-based outreach, communication, and education of the community, build skills and capability in the community, and provide for increased community participation in, and access to, government decisions. The model defines levels of public participation and presents characteristics useful in evaluating mechanisms. The Ashford/Rest case studies (which accompany the model) clarify these mechanisms with real examples. Application of the model elucidates the value of public participation in the case studies.

The model articulates the following ingredients for fair and competent public involvement mechanisms:

1. Agency clarity on goals and stakeholder roles in public participation
2. Top management commitment to the public participation process
3. Manager/leader goes beyond legal minimum
4. Agency responsiveness to stakeholders
5. Two-way communication and education
6. Interactive and iterative public participation
7. Adequate resources
8. Development of provisional trust between agency and public
9. Giving priority to trust building actions
10. Openness of the agency

The contaminated communities from which the Ashford/Rest model was designed were Superfund sites. The Pittsfield case is a negotiated settlement cleanup site; however, the model is appropriate for this case because the contamination at the site is extensive and dangerous enough to qualify for Superfund status. EPA proposed the site to the NPL, but did not pursue an actual listing as part of the negotiated agreement. The government did reserve the right to list the site on the NPL if it becomes necessary in the future. The model is also intended for the analysis of cases involving more than one federal agency as well as both state and local actors, certainly

the case in Pittsfield. And like Pittsfield, cleanup options and economic redevelopment were issues of debate at the study sites.

Procedural Fairness

Ashford and Rest list several important elements for evaluating public participation mechanisms and their *procedural fairness*:

- Access to information for all members of the community
- Diversity of community views represented
- Financial and intellectual/technical resources
- Openness, transparent processes
- Trust between citizens and government in overseeing the PRPs
- Trustworthiness (of individual actors acting in an honest, truthful manner faithful to their announced or perceived roles)
- Respect for different viewpoints and different forms of expression/expertise
- Accountability (of both government to stakeholders and individual participants to their constituencies); Agencies are committed to reciprocity, responsiveness, follow-up
- Appropriate balance of power (sufficient autonomy of participants from government, and balance of power among participating interests); public can participate in agenda setting for the mechanisms, discussion and debate, and development of decision making rules
- Autonomy of the mechanism

Procedural Competence

Mechanisms that exhibit the above traits of procedural fairness are not necessarily effective. In addition to fairness and accessibility, another measure of effectiveness is the *procedural competence*, which the model identifies by the following characteristics:

- Purpose of participation mechanism explicit and understood/agreed to by participants
- Access to knowledge, e.g., information, expertise
- Adequate time to learn about and discuss issues; reflect on variety of viewpoints

- Resources available for participants to obtain the information/expertise they need
- Participants willing and capable of participating

Outcome

Finally, to fully evaluate the effectiveness of public participation mechanisms, one must consider how well the mechanism achieved its initial aim:

- Did it foster development of mutual understanding among participants and between participants and agency? (Competent discourse; face-to-face discussion over time)
- Did it enhance equity and control for those affected?
- To what extent did it safeguard the disadvantaged and protect and promote minority interests and address power imbalances? (How did community members view the process and outcome of the mechanism?)
- Did shared decision-making take place?

Summary

Although the agency cannot control the willingness of the public to participate, the agency can influence whether or not participation continues and grows or slowly dies out due to frustration with the process. The quality of the public's repeated interactions with the agency is under the agency's control. The Ashford/Rest model provides insight into what constitutes quality interactions. Attention to the agency's clarity and consistency in answering questions, their commitment to the participation mechanisms and interacting with the community, and the agency's accountability all contribute to trust-building and mutual respect. Mechanisms dependent on two-way communication also facilitate mutual respect. By providing a diversity of public participation mechanisms, the agency can also help achieve a broader representation and diversity of views. If the same 15 community members attend the meetings in a town of 15,000, it is unlikely the agency will obtain an accurate view of the interests and concerns of that community. The agency needs to have a broad view in working with the public and can be effective by reaching out through different venues, at different times, with different levels of interaction. If the same agency employees participate in the different mechanisms, the agency

will develop a better understanding of the community. These dedicated officials should provide the community with guidance for asking questions and look to find funding to provide technical assistance grants or even short technical courses to enable meaningful public participation. Identifying citizen experts and providing site-specific training for these experts is another way to provide the community with a valuable local resource.

4.6 Analysis of Pittsfield Public Participation

4.6.1 Analysis of the Role of the Trustee

When acting as a trustee on behalf of the public, the government often utilizes participation mechanisms that focus on getting input from the community. This input must be resolved into a single position. This consensus can either be utilitarian or communitarian. EPA strove to reach a communitarian consensus within the community, incorporating input from all viewpoints present in the community. However, due to the time constraints of the negotiations combined with the secrecy required on the content of the negotiations, a utilitarian consensus, less representative of the community, was more likely reached. Only visible members of the community participated in the utilitarian consensus building process (Ashford/Rest 1999).

The Environmental Protection Agency's Office of Emergency and Remedial Response conducted its own study of what constitutes success in community involvement. The results of the study will be used to improve the community involvement function of the agency. Although the study is not complete, according to survey responses, residents were not satisfied with the amount or type of information they received from EPA.¹⁵ Residents wanted more information and more detailed information. The study also found that risk perception was lowest among those who made use of the public participation mechanisms offered, including public meetings and reading fact sheets (Bonarrigo 1998).

¹⁵ It is important to note that the respondents to the survey were unable to recall which agency had provided what information. Therefore, although EPA conducted the survey, the results more likely reflect a blend of citizen's opinions about the involvement of *all* the agencies, state and federal.

Within the feedback EPA received from the survey respondents, there were five requests that appeared repetitively. Residents want 1) a published work schedule, 2) information on property values, 3) more information on the nature of PCBs including health risks, fate and transport theory, and a comparison of common Pittsfield levels to “normal” levels, 4) personal communication before reading about new information in the newspapers, and 5) one agency to lead the cleanup, hold GE accountable, and make things happen. This latter desire would solve the problem identified by focus groups that there is a great deal of confusion among local residents as to what agencies are involved and where information is coming from (Bonarrigo 1998).

EPA’s Project Manager Bryan Olson gained the respect and trust of the stakeholders within the community and in the other agencies. Olson was viewed as an “encyclopedia of knowledge” on the case, and was able to apply his people skills and engineering background to satisfy concerned citizens. Olson held himself accountable for providing information and representing the interests of the public when advising DeVillars on EPA’s stance in the negotiations.

According to Angela Bonarrigo, EPA considered itself battling GE for “the heart and soul of the community.” Even though citizen interests were not directly represented in the negotiations of the cleanup, EPA worked hard to gain acceptance of the decisions they made, especially after the breakdown of the negotiations. The public was divided into factions, some concerned with getting a thorough cleanup environmentally and other concerned with the stigma association with NPL sites and the economic devastation that can bring.

Since 1990, Bryan Olson has been the manager of EPA’s involvement at the GE Pittsfield site. Olson demonstrated his ability to accept responsibility in all his efforts on the Pittsfield case. According to co-worker Angela Bonarrigo, Olson gave residents the sense that he took responsibility for what he said. Instead of only reporting on what the “agency’s opinion” or another abstract entity, Olson would state *his* opinion and indicate that he believed that what he was saying was true. This accountability helped to quell residents’ fears that if something went

wrong, they had nowhere to go. It also allowed the residents to transfer the trust they had in Olson as a person to EPA and the team working on the Pittsfield case (Bonarrigo 2000).

Olson was a leader in EPA, but more importantly, a leader within official and unofficial negotiations. Olson and others helped to create a feeling among the negotiators that their goals and work were intertwined with each other, and that a specific end point could someday be reached. Agreement on the final goal that would satisfy all the negotiating parties has still not been finalized (Olson 2000). However, according to others at EPA, Olson behaved as if he were personally responsible for the outcome (Bonarrigo 2000). He sought not only to ensure that the cleanup is done right, but that the right cleanup is done (Olson 2000).

Olson's knowledge of the subject was his most important asset and proved to be invaluable in many situations. His peers at EPA have described Olson as a "walking encyclopedia" on the Pittsfield case (Bonarrigo 2000). Olson's command of the history and current information on the topic made it impossible for GE to confuse or mislead Olson in meetings. When the community attacked EPA in community meetings, Olson was able to calmly answer questions accurately and defend EPA's actions. Although DeVillars was the final word on all major decisions due to his authority as EPA Regional Administrator, he often looked to Olson for advice on how to proceed. With the extensive demands of his position, DeVillars had to rely on Olson to get the facts and reach a consensus with the other staff at EPA working on the case. His deep and extensive knowledge on the case, as well as a commitment to continuously stay up to date on developments, was the basis for a well-founded self-confidence.

The Pittsfield Mayor and co-worker Angela Bonarrigo describe Olson as a good listener. Perhaps his listening skills contribute to his ability to understand people. Olson, more importantly, understood the context of the problem and the environment of fear and confusion in the community. His team and Bonarrigo's community outreach efforts helped towards involving the citizens. For example, Bonarrigo went door to door with other EPA staff members to explain EPA's position to Pittsfield residents and hear their feedback. EPA needed to force GE to participate in the cleanup of Pittsfield, but providing many opportunities for citizens' voices to be

heard helped individuals feel as though their opinion did matter and that EPA wanted them to feel safe and satisfied with the results (Bonarrigo 2000).

Not only was Olson capable of empathizing and understanding the residents because of his emotional intelligence, but Olson also had personal experience. Not just experience working for the EPA on such a large issue, but an experience similar to the Pittsfield residents. Olson grew up in Woburn, Massachusetts, which is a former Superfund site (Olson 2000). Local industry in Woburn polluted the area with TCE (trichloroethylene) which is also listed on the Agency for Toxic Substances and Disease Registry (ATSDR)/EPA list of Top 20 Hazardous Substances (along with PCBs). The International Agency for Research on Cancer (IARC), part of the World Health Organization, lists TCE as chemicals that are "probably carcinogenic to humans." A 1997 report by the Massachusetts Department of Public Health concluded that "the relative risk of developing childhood leukemia was greater for those children whose mothers were likely to have consumed (contaminated well water in Woburn) during pregnancy" (Harvard 1999). While growing up, six of Olson's childhood friends died of leukemia. Certainly, personal disclosure about Olson's past experience as a Woburn resident helped dispel the idea that he might be a removed, unfeeling "fed" (Olson 2001). In sum, Olson acted in a trustworthy manner, and in doing so engendered trust in the process, even if public participation was ultimately minimal.

4.6.2 Analysis of the Mechanisms Used by the Community Groups

Community Group	Received Grant(s) From Government	Collaborated with other Community Groups	Part of the Citizen's Coordinating Council	Held Public Educational Events	Organized Protests	Filed Lawsuits Vs. GE	Filed Motion to Intervene with Consent Decree
Housatonic River Initiative (HRI)	+/-	+/-	+		+		+/-
Housatonic River Restoration (HRR)	+	+	+	+			
Get R.E.A.L.	-	+/-	+	+	+	-	
Citizens for PCB Removal		+	+		+		
HEAL (CT-based)		+					-

Table 4.2 Success of public participation mechanisms used by the community groups.

Communication Mechanisms Used by the Community Groups

The community groups were most effective at communicating with the community informally, with the exception of HRR's student symposium. HRR focused on consensus building communication. Their technique focused on communicating one-on-one with people and in working groups at the student symposium. The communication function this community groups served was gathering, compiling, and distributing the restoration consensus to the rest of the community and the NDRC (Fletcher 2001).

HRI had the trust of the present and former blue-collar workers in the community, and these individuals who had knowledge of off-site dumping areas confided in HRI. When HRI went directly to the EPA and MA DEP with the information, the agencies did not always pay attention. It was not until one member of HRI suggested establishing the phone line dedicated to anonymous reports at the MA DEP that the agencies were able to fully appreciate the information. For example, the Pittsfield dump was filled with almost one thousand barrels of PCBs and PCB wastes. The story was that on Saturday afternoons, GE haulers would "borrow" the keys to the dump, and bring their loads then. It took months of convincing to get the agencies to spend the money on testing to check on these stories. By far, the majority of tips have been correct (Gray 2001).

Capacity and Skill Building Mechanisms Used by the Community Groups

It has been three years, and the Housatonic River Initiative (HRI) has still not spent the entire \$50,000 grant they received from EPA. According to EPA Project Manager Bryan Olson, this is frustrating. EPA chose HRI to receive the award because HRI was one of the most vocal community groups, and EPA recognized that HRI served as a resource on the GE case for much of the community. However, Tim Gray of HRI has indicated that the group fears spending all of the money. They have heard of groups spending grant money too quickly, and then regretting their expenses. These remorseful groups had inevitably learned of other uses for the money that might have been more useful to the community. Trying to avoid these pitfalls, HRI held on to almost half the grant for three years. They are planning on using the rest for a modeling project,

similar to EPA's, to double-check the agency (Gray 2001). Gray and others realize that the remediation proposals for the rest of the river depend on the results of this modeling study (Consent Decree 2000). They would like to use the money to ensure that the modeling results are as accurate as possible. After the group spends the money, they can apply for a renewal through CERCLA. Even though the site was not listed on the NPL, a new rule, promulgated in October 2000, allows sites that are *proposed* listings to be eligible for renewal (Olson 2001). HRI is not taking any chances on not winning a renewal (Gray 2001).

Most of the grant money spent by HRI was on an epidemiological study of the City. These results are not yet available, although the study began in 1998. Many members of the community have been concerned with the potential health effects from the contamination, and will be interested in the results (Gray 2001). Community members of the CCC have been pushing for MA Department of Public Health and Safety to be more involved in the case (Manasewich 2001). This outside epidemiological study may help to expedite a corresponding government study.

The \$10,000 technical assistance grant awarded to Get R.E.A.L. would have benefited the residents and owners of fill properties, had they received it two years earlier. Although the grant enabled the community to hire technical expertise, the grant came too late. The main concern the residents wanted to address was the averaging of the fill properties. Unfortunately, over 80 sites had already been completed, and it was too late for the Licensed Site Professional (LSP) to change the scenario for future sites. Although the first grant resulted in little utility for the group and the community, Get R.E.A.L. applied for and was awarded a second grant. This grant is being used to fund work with a communications firm in Boston so the residents of the fill properties could tell their story. The group had learned a considerable amount from talking to people in Woburn, Massachusetts and in Connecticut who had lived on contaminated properties and gone through this before, and they would like to record their experiences for the benefit of future communities dealing with contamination (Orsi 2001).

HRR's use of their capacity building grants was very successful. The group used the money to create public participation mechanisms, including meeting, home visits, and a symposium. The group put together an extremely comprehensive and professional restoration plan for the Housatonic River, incorporating input from over 1,000 individuals. The group sought to reach a communitarian consensus, and succeeded. Whether or not the Natural Resource Damages Council (NRDC) will adopt the plan to not remains to be seen (CCC Meeting 2001). The plan includes short-term restoration plans and long-term stewardship goals. First, the community recommends the establishment of an entity to oversee the comprehensive approach, separate from the NRDC. Several people suggested that this entity should also provide technical assistance and other services to enable other groups to accomplish projects, such as riverway cleanups or school science projects. The main sections of the report are as follows: water quality controls, a watershed management plan, educational programming, creating canoe access sites, maintenance to ensure a navigable and safe river, establishing a "beaded necklace" approach, ecological restoration and starting a River Guardian program to monitor the river, community-based stewardship programs, and land acquisition (*The Housatonic River Restoration Plan* 1999).

HRR also planned and held a major student symposium. Over 400 individuals joined together, including more than 250 students from first grade level to college, to brainstorm ideas for restoration of the river and its stewardship. The group accomplished their goal to bring together many different types of stakeholders to work together towards river restoration. Not only were HRR's activities productive, but also the process was beneficial to the participants. Planning for a clean, safe river made strides in restoring people's hopes for the future of the area (Fletcher 2001).

4.6.3 Analysis of the Citizen's Coordinating Council (CCC)

The CCC succeeds in serving as a vehicle for community involvement in the implementation of the settlement agreement between GE and the government. All the local citizen groups (H.E.A.L. is not a local group) are invited to sit at the table with representatives from GE and the

government agencies overseeing the case. The mediation system ensures that a list of “action items” is created at every meeting, and the mediator ensures that the items on the list are attended to. The mediator’s involvement takes the pressure off from the individuals present to pester people for responses from month to month, serves as a communication device by providing meeting notes, and helps ensure the accountability of all participants.

The meetings are held in a disabled-accessible room in the basement of the Pittsfield public library. Translations into foreign languages or American Sign Language are not available, as they do not seem necessary for anyone in attendance. Unfortunately, the meetings are always held at the same time on the first Wednesday evening of every month. This makes it convenient for the government officials and GE representatives for planning purposes, but prohibits individuals who have a different standing commitment on Wednesday evenings from ever attending. This compromises the CCC’s goal to be “a mechanism to ensure that all parties to the negotiated agreement are able to honor their commitment to listen to, to learn from, and incorporate the ideas and concerns of the community to the greatest extent possible” (Consent Decree 2000). Representatives from HRI are permitted to videotape all the meetings, and notes from the meetings are posted on the EPA New England Internet Website.

A Group Left out of the Process: Connecticut Stakeholders

No final agreement was made with General Electric concerning remediation of the Housatonic River for the stretch that begins two miles below the Pittsfield plant site. Connecticut residents along the southern Housatonic River are concerned with the migration of the contaminants. In the Consent Decree, EPA committed to perform a study of the rest of the river with computer modeling technology. EPA will then propose a remediation plan to GE, which GE can accept or appeal. They are worried that if PCBs are detected in Connecticut, it will be too late to force GE to pay for remediation. Connecticut will receive some money from the NRD, and so far has focused on posting signs to warn fisherpersons not to eat what they catch from the river.

One environmental group in Connecticut, H.E.A.L. (Housatonic Environmental Action League), filed a motion to intervene against the Consent Decree. The court did not grant the intervention.

Representatives from the group attend the monthly CCC meetings in Pittsfield to facilitate communication with the Pittsfield community groups. To facilitate communication between the community groups in Pittsfield and further downriver, the CCC voted to create a CCC Sub Committee, which meets on a quarterly basis in Connecticut. The same Region One EPA employees, including Bryan Olson, attend the CT meetings. GE has declined to send representatives to the CT meetings, and they are not required to do so in the Consent Decree. Like the CCC meetings, the CCC Sub Committee meetings are open to the public (Olson 2001).

4.7 Activities/Programs Enhancing Interagency Coordination

Interagency coordination can benefit the community by enabling the agencies to serve the community better. Agencies can support one another in fighting against strong opposition and avoid duplication of efforts. Good communication between the agencies helps the community by providing consistent information. Trusted agencies can use their credibility with the community to boost the credibility of a less-trusted agency through partnerships. The Ashford/Rest model suggests five guidelines for interagency coordination:

1. Designated person(s) for interagency coordination at all levels of government
2. Federal interagency working groups
3. State or local interagency working groups
4. Multi-level interagency working groups
5. Establishment of formal administrative protocols for coordination

An interagency negotiation team was formed in Pittsfield in 1995, including representatives from four federal and five state government agencies. A mechanism to communicate was set up, including intergovernmental liaisons. The task force had regular meetings in order to approach GE as a united front in the negotiations. EPA and MA DEP struggled over some jurisdictional issues until it was determined that MA DEP would be in charge of managing the resident fill properties and EPA would manage the remediation sites under the Consent Decree. The agreement between the federal agency, ATSDR, and the Massachusetts Department of Public

Health and Safety (DPH) represents another example of interagency coordination on the Pittsfield case. Neither agency was involved in the negotiations. ATSDR is required by CERCLA to do a health assessment on any site proposed to the NPL. The agency has a cooperative agreement with the Massachusetts DPH, under which DPH is in the process of doing the health assessment for ATSDR (Olson 2001).

CHAPTER 5. Conclusions

5.1 *The Consent Decree and the Actions of the Trustees*

In this case, government acted as a trustee on behalf of the public's interests in the negotiations. EPA and the other government agencies worked hard to achieve a communitarian consensus of the public through several public participation mechanisms. However, a utilitarian agreement was reached by the agencies. Since the public was not allowed to take part in the negotiation process, the public could not respond to the proposed Consent Decree until the end of the year-long negotiation and the start of the public comment period. The public was at a serious disadvantage, confronted with a several hundred page technical document with only sixty days to respond. The agency did extend the public comment period on several occasions; however, based on the constraints on public involvement it is likely that the agreement reflected the agencies' opinions based on their assessment of the risks rather than on the community's perception of the risks. GE had also solicited signatures from most local businesses in support of the settlement, which was published in *The Berkshire Eagle* during the public comment period. This unified message sent by this particular group of stakeholders had a strong impact engendering a majority of community acceptance. The Consent Decree did not address the rest of the river in a manner satisfactory to those located below the two-mile reach, and left citizens living on the fill properties uncertain of their legal rights. The motions to intervene against the Consent Decree and the over 50 lawsuits filed against GE are evidence of this confusion. Most importantly however, the response actions delineated by the Consent Decree will create a far safer environment for the contaminated community.

5.2 *National Priorities Listing versus a Negotiated Settlement*

The Pittsfield case is unique in that such an extensively polluted area was not listed on the NPL. Often, the potentially responsible party has deserted the site, is not easily distinguishable from other potentially responsible parties, or is unable to pay for the cleanup costs. General Electric was the only major industry in the area, and could not contest its responsibility for the

contamination. The company could have refused to negotiate, wasting even more of the federal government's tax dollars on legal fees to fight GE in court. There are several criteria useful in comparing which outcome was better than the other; however, weighing the criteria against one another to determine which choice was better for the public does not give a clear answer. There are several uncertainties in every case, and each person values each criterion differently. In table 5.1, the criteria are listed in the left-most column. These criteria have been adapted from the cross case comparisons in the Ashford/Rest model. The comparisons are based on information from studies of other Superfund site cleanups of similar size. In the boxes under the two choices, listing the site on the NPL or negotiating a settlement, the two processes are compared with a + or -. Since we can never know what would have happened if EPA had gone through with putting Pittsfield on the NPL, these comparisons reflect the *potential* outcomes.

EPA, the lead federal agency on the case, had two main options. The agency could have chosen to use the federal Superfund monies to begin a cleanup, and follow up by suing General Electric under CERCLA for up to three times the cost of the cleanup. Instead, EPA favored negotiating with GE to try to reach agreement on a cleanup, funded by both parties. The fact that GE was the only potentially responsible party (PRP) made the negotiating possible. Had there been a debate over who was responsible for the contamination, it would have been too complicated to negotiate. GE refused to negotiate with the EPA unless members of the public were barred from the negotiations and the individuals present were sworn to secrecy. However, according to Bryan Olson, the Superfund process is not much more transparent. Both proposed remedies, via Superfund or negotiation, would be subject to a public comment period of the same length.

Table 5.1 Which process is fairer? Which process achieves the “better” outcome?¹⁶

Criteria	National Priorities List	Negotiated Settlement
Comprehensiveness and Quality of the Remediation	+	+
Comprehensiveness and Quality of the Restoration	-	+
Speed with which the Remediation took place	-	+
Speed with which the Restoration should take place	-	+
Cost of the Remediation to the Taxpayer (more cost to taxpayer = “-“)	+	-
Cost of the Restoration to the Taxpayer (more cost to taxpayer = “-“)	?	?
Amount of public funds spent on Legal Fees	-	+
Use of the Former GE plant site	-	+
Economic Redevelopment for Pittsfield	-	+
Fairness of Process	+	-
Fairness of Outcome	+	-
Stronger interpersonal relationships and social fabric	+	-
Public involvement as a means to facilitate continuous change	+	-
Community awareness, education, and empowerment (mobilizing the entire community)	+	-
Legitimacy of views and interests (possible related to, but identical with respect)	+	-
Encouragement of discourse to facilitate both shared understanding and shared values	+	-
Recourse for Future Problems at the Site	+	?

¹⁶ For example, the author lists a “+” for “fairness of process” under NPL and a “-“ under negotiated settlement. This does not necessarily mean that the negotiated settlement was an unfair process, but that the author believes the process to have been less fair than it might have been under the NPL.

Risk to Human Health and the Environment

Since the negotiation process occurred outside of court, it is almost certain that the negotiated settlement proceeded much more quickly than a NPL process for the site. Reducing the exposure to PCBs as quickly as possible reduced the risks of exposure more quickly. However, new research suggests the long-term effects of low-exposures can be just as devastating (Ashford 1991). Since the EPA officials on the case acted in a trustworthy manner, we must assume that the cleanup they agreed to in the negotiated settlement was as thorough as that which they would have expected to achieve through a listing on the NPL. The restoration process will undoubtedly be completed faster with the negotiated settlement.

Those living on the Connecticut banks of the Housatonic River are left at a disadvantage because of the relatively quick settlement. The negotiations were already extremely complex for the Pittsfield plant and the first two miles of the contaminated portion of the river. More testing was agreed to in the Consent Decree to determine the human health and environmental impacts of the rest of the river, but the agreement leaves little leverage in negotiating a remediation of the rest of the river with GE. Had the site been listed on the NPL, the agencies would not have had to compromise on the potential cleanup of the rest of the river.

Fair and Just Process

Public Participation

Although the negotiation process facilitated a faster cleanup, the public has less time to gain the knowledge needed to respond well because the process proceeded much more quickly. Since the Consent Decree established the Citizen's Coordinating Council, the CCC had no input on the remediation agreements contained in the Consent Decree. It was in GE's best interests to complete the negotiation as quickly as possible. The company wanted to complete its official responsibilities with the site and place as much distance as possible between connections among the contamination and potential health effects. A faster resolution reduced the amount of time to further investigate for past dumping sites. Already 80 properties had been remediated by the time Get R.E.A.L. Pittsfield had heard of applying for technical assistance grants, done so, and

received the money to hire a LSP for consultation. Everyone wants a fast cleanup of a hazardous problem, but when the remedies are complicated and various, it is unfair to rush people through. Unlimited clear explanations cannot take the place of the time people need to digest and process information.

Natural Resource Damages

The public may suffer from a low estimate for Natural Resource Damages. The calculation for NRD is usually done after the cleanup has finished. Assessors examine the site, the riverbanks, the river itself, etc. and estimate the costs to restore the natural conditions. The statute of limitations to change this amount normally runs out for the Natural Resource Damages Council three years after the site is removed from the NPL.¹⁷ In this case, in order to wrap up the case sooner, the government assessors reviewed the plans for the extent of the remediation and estimated a number to repair the damage the remediation would cause before many of the remediation projects had even begun. With the negotiated settlement, the statute of limitations will run out three years after the trustees received the dollar amount of the damages, regardless of the condition of the remediation the site and other affected areas. There is no recourse available to the trustee after the three years (Fletcher 2001).

Grants for the Community

Under CERCLA, NPL sites are eligible for \$50,000 Technical Assistance Grants (TAG), which are awarded to a community group concerned with the Superfund site were renewable annually in \$50,000 increments. A new rule, promulgated Oct. 2, 2000 at 40 CFR Part 35, increased flexibility by no longer requiring the renewal be in \$50,000 increments, but also by making no distinction between a proposed listing and a final listing. Under the previous rule, only communities with a site that has established a final listing on the NPL were allowed renewal of the TAG. Since 1990, proposed sites are also eligible (Olson 2001). Therefore no difference ultimately exists for the site's eligibility for government assistance with regards to skill

¹⁷ A site cannot be removed from the NPL until EPA determines that no further response is needed to protect human health or the environment. The Regional Administrator must approve a "close-out report" that establishes that all appropriate response actions have been taken or that no action is required (EPA 2001).

development in the community. Hopefully, HRI will be able to apply for a renewal of its TAG after the original grant has been spent.

Best Use of Tax Dollars

When Superfund monies are used to perform a cleanup and the potentially responsible parties are sued in court, often, a settlement is reached. According to DeVillars, rarely are all the costs recovered. Thus, it is difficult to determine exactly how much of the one and one-half mile stretch of river cleanup would have been paid for with federal dollars had the site been listed on the NPL. In the Consent Decree, GE committed to spending \$33 Million on this portion of the river, and EPA agreed to pay the rest, which is estimated at \$12 Million. Unfortunately, most projects overrun their estimated costs, and the EPA will be left holding the bill. However, a benefit to the negotiated settlement was the amount of legal fees saved by the agencies.¹⁸

Economic Recovery

The economic recovery of the region should be greatly improved by the economic aid provided by GE. The unprecedented reuse of the GE buildings will make commercial space available much more quickly than rebuilding after the Superfund process would be complete. In the case of economic redevelopment, GE's desire to wrap up the Pittsfield case is an advantage. The company has committed \$50 Million to redevelop the site for the City's use, and provided \$10 Million in direct aid (EPA 2001). Historically, it is unlikely that the responsible party would offer these redevelopment funds through the Superfund process.

Human Impact

Although EPA may, through the settlement, have achieved a level of cleanup equivalent to the cleanup possible through Superfund, many community members (especially those in the activist groups) feel suspect of that fact. These individuals felt rushed through the process, with hardly

¹⁸ According to William Shutkin, Professor of Urban Studies and Planning at MIT, 75% of the money spent on Superfund sites has been on the legal fees, not the cleanups (Shutkin 2001).

enough time to understand the impacts of the site and the remediation, let alone respond. They also disliked the fact that GE told the agencies that the public had to be left out of the process to negotiate, and the agencies agreed. Government agencies exist to serve the public, and the public does not feel well served when they are excluded. Although EPA made, in some instances, heroic efforts to communicate with the community about the site, they could not make up for “keeping the negotiations secret.”

Summary

In conclusion, the negotiation process resulted in several positive impacts on the community, but could have been improved. Better public participation could be achieved with community involvement in the negotiations and more time for the public to digest the information. Unfortunately, both involving the community and a drawn out negotiation would be strong detractors for a company to negotiate. Under those stipulations, for example, GE would have refused to participate in negotiations. Moreover, the company threatened to use its extensive resources to extend a court battle for as long as possible, and promised to discredit the science indicating PCBs are hazardous. However, for a fair and just solution, the community *as a whole* must be represented in the decision-making process if choices between economic viability and future health impacts might be made.

5.3 Value Added by Public Participation in Pittsfield

The greatest impact public participation had on the Pittsfield case was by helping to identify off-site contamination. By passing on information through word of mouth and through the toll free phone line established by the MA DEP, the public identified all the residential fill sites and many other large areas of contamination in town. Interviewing ex-employees provided valuable historical information about GE’s past industrial practices on the site. The community groups had the greatest impact outreaching to other members in the community and educating them about the process happening with the agencies as well as the information the groups collected on health risks, remediation options, etc.

A second valuable contribution was HRI's indirect impact on the negotiations. According to DeVillars, HRI's outspoken environmental position enabled EPA to gain some leverage with GE in the negotiations. GE understood that it was EPA's responsibility to act on behalf of the public, and HRI helped paint a picture of a more concerned community than actually existed. Although the level of concern expressed by members of HRI is not representative of the entire community, the agreement required compromises on the part of both parties, and the agreement reached by EPA was less stringent than HRI would have liked. The result is probably closer to what the public wanted than it would have been without the voices of HRI. The dissatisfaction of HRI and some of the other community groups is an indicator of the utilitarian consensus reached by the agency.

An important turning point in the case occurred when *The Berkshire Eagle* published a letter in favor of the settlement signed by many CEO's of local businesses. GE gathered the signatures in a concerted effort to build consensus with the main economic players in the region, including the PEDDA and local businesses, and paid to post the page in the newspaper. The EPA received many letters during the public comment period from these stakeholders, urging EPA to accept the agreement. According to Mayor Doyle, a finalized listing on the NPL would devastate the community. People feared the area would become an economic wasteland because nobody would want to risk exposure to contamination by visiting the area. It was at this time that the tone of *The Berkshire Eagle*, previously sympathetic to the environmentalist point of view, changed permanently to favor a settlement with GE.

It is unknown whether or not these members of the business community are aware of the hazards posed by the extent of the contamination that will remain after the cleanup. It can be difficult, while enjoying the view of the Housatonic River in the beautiful setting of the Berkshires, to believe that interacting with this environment could cause serious health impacts. The presence of PCBs is unnoticeable to the human senses, unlike the stench of raw sewage leaks, the difficulty breathing while near busy roads, or the hazy views caused by smog. In the case of contamination that is more offensive to the senses, it is in the interests of the economic

stakeholders to cleanup the problem as best as possible because they cannot hide the problem. PCBs are only made visible through press releases or other public announcements.

5.4 Missed Opportunities for Public Participation in Pittsfield

The emergence of several community groups in a short period of time, concentrated around the negotiations, is an indicator that there were failures in the system. Had the public been confident in the process of reaching a remedy, they would not have made the choice to devote all their spare time to researching toxic chemicals and picketing the GE site. The closed negotiation set very real limits on the potential for public participation. Despite communicating with the public outside the negotiations, a feeling of powerlessness prevailed among many members of the community. EPA and the other agencies made strides to involve the public; however, there were some missed opportunities.

Not all the mechanisms were available to all members of the community. More attention needs to be paid to meeting times, location, and childcare. Home visits by Olson and Bonarrigo on behalf of EPA certainly helped, but the ability to hear the other thoughts within the community at meetings or through newsletter summaries of public meetings would be helpful.

The agencies need to be more conscious of the “divide and conquer” strategy often employed by industry against environmentalists. The formation of separate community groups concerned with the river, the remediating of the site, the fill properties, and the allocation/spending of NRD weakened the overall impact of the community organizing and resulted in the duplication of some efforts. The formation of the CCC *after* the Consent Decree was ratified did not help these groups unite during the critical stages of the agreement. Just as the agencies had an intergovernmental panel, the agency could have facilitated an intercommunity group panel.

The agencies could have paid more attention to helping the public ask questions. Members of Get R.E.A.L. commented on how helpful it was for them to listen to a speaker they invited, the lawyer from the Woburn contamination case. If the agencies cannot provide contacts to other

contaminated communities themselves, they should provide the community with the idea and some possible contacts. Questions about technical assistance grants, choice of the remediation contractor, or a community observer for the negotiations did not come up until too late. For example, Get R.E.A.L. had many concerns regarding the fill properties. Most members were not equipped to understand the technical environmental impact statements on the fill properties. They were extremely dissatisfied with the practice adopted *part way through* the remediation of these hundreds of properties to average the concentration of PCBs in the soil.

A secondary concern was the quality of the restoration. Some residents complained that they did not receive enough topsoil to grow grass. All the water would quickly seep through the thin layer and descend through the sand used to refill the site, leaving the grass seed sitting on top, in conditions too dry to grow. Large, historic trees were replaced with seedlings. Residents who wanted to put off the remediation of the fill property until these concerns were resolved were told by MA DEP that if they did not sign the Access Agreements, that the DEP would pursue the owner themselves to cleanup the property. Contaminated communities need legal assistance in interpreting such documents as Access Agreements and the Consent Decree, and should not be forced to pay for it on their own.

Residents did not understand the Access Agreements they were required to sign to allow for testing, remediation, and restoration of their fill property. When problems began to occur, such as a truck driving over a sewer line on a property and breaking it open, residents did not have recourse. These accidents were not provided for in the Access Agreements; MA DEP did not have the money to pay and GE was not accountable according to the document. Over time, trial and error experienced by the victims created some knowledge sharing through Get R.E.A.L. However, it is unfair that these fill property residents were victimized twice: first, with the original contamination and second, by a lesser restoration. EPA provided some support to the fill property residents, but the fill properties were officially under MA DEP jurisdiction. These mishaps underline the need for improved communication within a community, and a deliberate, fair process.

The creation of the CCC *after* GE and the agencies already agreed to the major remediation plans for Pittsfield undermined the community's trust in the agency. The state mediator stated that the CCC was "not designed to affect the process, but to understand and communicate about it." While an extremely useful communication tool, the CCC meetings could also be an opportunity for the agency to involve the public.

5.5 The Adequacy of the Ashford/Rest Model in Analyzing the Pittsfield Case

The Ashford/Rest model provides a comprehensive analysis for examining the effectiveness of public participation in contaminated communities. The model extracts the essence of all the major literature on public participation and synthesizes it into a complex diagnostic tool, applicable to real world scenarios. The model makes meaningful analysis possible by providing a measure for comparison. The model provides the questions about the process that the contaminated communities themselves would benefit from asking *during* the process. This suggests that the community should be involved in ongoing evaluation of the participation mechanisms used by the agencies and community groups. Providing a legal advisor, paid to help the community interpret legal documents (such as the Consent Decree), is one mechanism not specifically mentioned under skills and capacity building.

The Ashford/Rest model discusses several vehicles for public participation, focusing on those that create broad-based outreach, communication, and education of the community, build skills and capability in the community, and provide for increased community participation in, and access to, government decisions. In the Pittsfield case, the community was barred from participating in the negotiation process due to GE's stipulations. The model does not specifically address industry's involvement in the public participation process. GE's involvement was extremely critical in this case, because the agencies were not just fighting industry in court. The agencies were trying to work *with* GE, to reach an agreement, taking into consideration both party's goals: EPA's goal to achieve the best environmental cleanup possible, and GE's goal to spend as little money as possible. The model also does not incorporate a tool to compare

negotiated settlements such as in Pittsfield with Superfund cases. The section on cross-comparing Superfund cases is adaptable for this purpose, but probably not comprehensive in these special cases.

Acronyms and Abbreviations

ACOE - U.S. Army Corps of Engineers

Appendix S - the confidentiality agreement signed by the negotiating parties (part of CD)

Appendix T - part of the CD that lists the addresses for the resident fill properties

ATSDR - Agency for Toxic Substances and Disease Registry

BNR - Bureau of Natural Resources

CAA - Clean Air Act

CAB - Citizen Advisory Board

CAG - Citizen Advisory Group

CAP - Citizen Advisory Panel

CCC - Citizen's Coordinating Council

CD - Consent Decree

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act of 1980

CNS - covenant not to sue

CT AGO - Connecticut Attorney General's Office

CT DEP - Connecticut Department of Environmental Protection

CWA - Clean Water Act of 1948

DOD - U.S. Department of Defense

DOI - U.S. Department of Interior

DOJ - U.S. Department of Justice

DPH - Massachusetts Department of Public Health

EOEA - Massachusetts Executive Office of Environmental Affairs

EPA - U.S. Environmental Protection Agency

EREs - Environmental Restrictions and Easements

GAO - U.S. General Accounting Office

GE - General Electric, Inc.

H.E.A.L. - Housatonic Environmental Action League

HRI - Housatonic River Initiative

HRR - Housatonic River Restoration, Inc.

HVA - Housatonic River Valley Association
HWSA - Hazardous Substances Waste Act of 1984
IARC - International Agency for Research on Cancer, part of the World Health Organization
LSP - Licensed Site Professional
MA AGO - Massachusetts Attorney General's Office
MA DEP - Massachusetts Department of Environmental Protection
MGL - Massachusetts General Laws
NOAA - National Oceanic and Atmospheric Administration
NPL - National Priorities List (established by CERCLA)
NRD - Natural Resource Damages
NRDC - Natural Resource Damages Council
PCBs - polychlorinated biphenyls
PEDA - Pittsfield Economic Development Authority
ppm - parts per million
PRP - Potentially Responsible Party
R.E.A.L. - Residents Environmental Action League
RAO - Response Action Outcome
RCRA - Resource Conservation and Recovery Act of 1976
SARA - Superfund Amendments and Reauthorization Act of 1986
Superfund - refers to CERCLA and SARA legislation, as well as the fund created by CERCLA
SWDA - Solid Waste Disposal Act of 1965
TCE - trichloroethylene
TSCA - Toxic Substances and Control Act of 1976
USGS - United States Geological Survey

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APPENDIX A. Main Outline for the Consent Decree

The Pittsfield Remediation Plan:

Currently in Pittsfield, EPA New England is overseeing remediation of the Housatonic River and related land areas. The plan does not outline the use of any of the above mentioned remediation techniques. The decision-makers drew up a remediation strategy that uses such procedures such as soil removal and replacement, habitat restoration, placement of infiltration barriers, capping of various areas, including the 26 acre bottom of Silver Lake and an industrial landfill, re-routing of a brook and comprehensive groundwater monitoring. The residential homes with contaminated lots have been excavated and replaced with "clean" dirt. The river oxbows, Allendale schoolyard and GE site are in the remediation process or have finished. The following is an outline for part of the ratified Consent Decree:

1. Cleanup of Specific Areas
 - a. Agreement Scope
 - b. Management Principles for the Cleanup
 - c. Areas
 - i. GE Plant Site
 - ii. Former Oxbow Areas
 - iii. Allendale School
 - iv. Housatonic River Floodplain (residential and non-residential)
 - v. Silver Lake
 - vi. Housatonic River (3 sections)
2. Brownfields Redevelopment and Economic Aid
3. Restoration of Natural Resources
 - a. Direct Action funded by GE
 - b. Compensatory Action by GE
 - c. GE funding of other efforts
4. Recovery of Government Costs
5. Form and Effect of the Consent Decree
6. Enhanced Public Participation
 - a. Management Architecture
 - b. Citizen's Coordinating Council

The following is the scope of the Consent Decree regarding the cleanup of contaminated areas and eight management principles for those cleanups.

I. Cleanup of Contaminated Areas

A. Scope of the Consent Decree

This agreement covers the GE Plant Site, including Silver Lake and Unkamet Brook, the former oxbows (including Newell Street commercial properties), the Housatonic River sediments, banks, and floodplain properties downstream of the GE Plant Site, and the Allendale School. With the exception of the residential properties within the former oxbows, this agreement does not cover cleanup of residential properties in Pittsfield or elsewhere that received GE wastes for use as fill. These properties are covered by a

separate Administrative Consent Order between Massachusetts and GE. More than 100 residential fill properties will have been cleaned up by the end of the 1999 construction season. Residential fill properties remain a high priority and will continue on an expedited sampling and cleanup schedule.

B. Overall Principles for Management of the Cleanup

1. Extensive sampling on GE and non-GE owned properties. Agencies to oversee all GE work and reserve the right to conduct additional sampling if necessary.

2. GE to perform cleanups except on 1 ½ Mile Reach of Housatonic River.

3. Material and debris excavated from areas subject to this Consent Decree, excluding the River below two miles, are to be consolidated on the GE facility subject to the following:

a. No disposal of regulated TSCA waste or RCRA hazardous waste in the Hill 78 Consolidation Area.

b. No on-site disposal of drums, capacitors, equipment, free product or asbestos required to be removed as part of the building demolition.

c. Area and height limitations of the consolidation areas as follows: Hill 78- 5.6 acre footprint and 1,050 foot maximum elevation, Building 71- 4.4 acre footprint and 1,048 foot maximum elevation, Merrill Road/New York Ave- 1.6 acre footprint and 1,027 foot maximum elevation. Elevation is based on National Geodetic Vertical Datum (NGVD). For reference purposes, current elevation of the top of Hill 78 (including the material from the Allendale School, as described in Item I.C.3) is 1049 feet.

d. Capping and long-term monitoring of consolidation units.

e. Building demolition debris, following the removal of asbestos, may also be consolidated within the existing foundations of certain buildings.

4. Environmental Restrictions and Easements (EREs) are to be placed on all GE-owned properties to ensure that current uses will not change (i.e., commercial/industrial properties will continue to be used as commercial/industrial properties and recreational properties will continue to be used as recreational properties) and to protect the integrity of the cleanup.

5. Two options for non-GE owned properties: a) cleanup that is protective of current use with Environmental Restrictions and Easements (EREs) utilized, with consent of the owner, to maintain current use, or b) a conditional solution which also provides a cleanup that is protective of current use but, instead of EREs, requires additional cleanup if the use of the property changes.

6. Fully cooperative approach to management of cleanup activities.

7. The parties have established a management architecture for project implementation involving EPA, state regulatory agencies, GE, and, as appropriate, PEDDA, the City and the Trustees to ensure that all aspects of the project are managed in a fully collaborative and cooperative manner, to plan work and to cooperatively head off problems and disputes before they arise.

8. Public to provide input throughout implementation of the work.

The following is an excerpt from the ratified Consent Decree for soil remediation on the General Electric plant site:

“A. GE Plant Site

Objective: To remediate surface soils to levels that allow for commercial/industrial or recreational use, and to minimize exposure to contaminants in deeper soils.

1. Remediation required for PCBs greater than 25 ppm average in superficial soils (0-1 feet).
2. An engineered barrier to minimize infiltration and prevent exposure will be implemented in areas where PCBs greater than 100 ppm average are within the top 15 feet.
3. Remediation required for PCBs greater than 200 ppm average from 1-6 feet.
4. New or repaired utility corridors will be backfilled with soils that contain no more than 25 ppm PCBs.
5. No capping of unpaved soils in floodplain. Soil removal and replacement is required instead to avoid loss of flood storage capacity.
6. Removal of pavement in 200-foot-wide buffer zone on northern (plant) side of River between the location of the former Thermal Oxidizer and the downstream boundary of the GE facility to provide enhanced habitat restoration and to reduce storm water runoff.
7. Future City of Pittsfield baseball field will include a one-foot cap in addition to achieving the recreational standard of 15 ppm PCBs average in the next 2 feet.

B. Unkamet Brook and Floodplain Remediation

Objective: To provide protection for human recreational users and biological receptors in the portions of the Brook and its floodplain from Dalton Avenue downstream to the Housatonic River.

1. Reroute Unkamet Brook to its former channel and cap entire existing industrial landfill.
2. Remove Brook sediments and remediate inundated wetland sediments to achieve 1 ppm PCBs average in surface sediments.
3. Remove soils in Unkamet Brook recreational floodplain to achieve 10 ppm PCBs average in top foot and 15 ppm in 1-3 foot depth.

C. Hill 78 and Building 71 Consolidation Areas

Objective: To eliminate risk of exposure to materials in the consolidation units through a combination of engineering controls and long-term monitoring.

1. Install a protective cap over Hill 78 and Building 71 Consolidation Areas.
2. Establish an extensive groundwater monitoring system to monitor the groundwater surrounding the landfill.
3. Install a liner and leachate collection system for Building 71 Consolidation Area.

4. Design both areas with human health and environmental protection, as well as configuration limitations, in mind.
5. An additional area at New York Ave/Merrill Road may be utilized and will be designed in a similar manner to the Building 71 Consolidation Area.

D. Silver Lake

Objective: to provide a clean-up that is protective of human and ecological use of the lake.

1. Remove bank soils at non-residential properties to achieve no more than 10 ppm PCBs average in top foot and 15 ppm PCBs average at 1-3 feet, assuming EREs are executed. If no EREs, a conditional solution will be implemented for bank soils that will achieve 10 ppm PCBs average in top 3 feet and meet the other requirements for conditional solutions in Item C.1.d.(ii) above. On residential properties, GE will achieve a 2 ppm PCBs average.
2. Remove and replace hot spot sediments near the outfall.
3. Cap the entire 26 acre lake bottom and armor the entire perimeter of lake; specific design plans to be approved in the future by EPA.
4. Perform periodic review of effectiveness of cap. If performance standards for cap are not met, additional actions will be evaluated and implemented.”

(Taken directly from the GE Pittsfield Consent Decree, ratified October 2000.)

APPENDIX B. Citizens For PCB Removal Reacts To PCB Consent Decree

Letter to EPA & Justice Dept. by Charles & Barbara Cianfarini and Dorothy Mara (Citizens for PCB Removal Comment Committee)

Citizens for PCB Removal believes that PCBs are harmful to public health. Not only are they probable carcinogens, but also they have been proven to be hormone disrupters and can cause lower IQs. The studies reaching these conclusions are not limited to the United States. Most of the world has banned the use of PCBs and we believe that these chemicals must be removed from our environment. Citizens for PCB Removal ("CPR") believes any settlement concerning PCB and other contamination in Pittsfield and Berkshire County, Massachusetts must accomplish a few basic goals: 1) it must provide for a thorough cleanup; 2) it must leave open options for dealing with future problems when they arise; 3) it must not balance the settlement on the backs of innocent property owners and taxpayers. The Consent Decree and the appended work plans are a good start to accomplishing a thorough cleanup; but are just that - a beginning. The Consent Decree is lacking in many ways. Our comments are informal, not technical, but state our passionate belief that the Consent Decree needs modification.

1. The settlement burdens innocent property owners in a way that is not in the public interest. The Consent Decree ("CD") contains 68 pages of cross covenants not to sue and grants of distribution protection which protect the United States government and the government of Massachusetts and Connecticut and the defendant, General Electric, while leaving all other property owners who own land containing General Electric fill or which was contaminated by a river exposed to potential future liability. Those owners are not only innocent of any role in causing the pollution, but have already been victimized by it. Leaving them exposed to future liability while letting General Electric off the hook is not in the public interest. The CD provides, in paragraph 189, that all parties to the CD preserve all their rights against all others not parties to it. Thus innocent property owners may be held liable under CERCLA or MGL c. 21E, for future problems caused by General Electric's pollution. While the law may allow liability to be imposed on innocent property owners, it is our understanding that the public policy behind the law seeks to ensure that there is some party available who can be held responsible for cleaning up the pollution. The need to hold someone liable, even an innocent someone, simply does not apply here. This is not a case where the polluter is unknown, or is bankrupt, or whose assets are for some other reason unavailable for cleanup. The polluter here is a party to this agreement and is not only solvent but in fact is one of the wealthiest companies in the world. A policy designed to ensure that funds are available to cleanup pollution is not served by shifting the future burden from a wealthy culpable defendant to innocent persons with vastly fewer resources. The potential for future liability is very real. Many properties are being cleaned only to a depth of a few feet. Deeper contamination is not being addressed. Particularly for the "oxbow properties" (see #7) which are filled to a depth of as much as 20 plus feet and which have not been thoroughly tested, the potential exists for future releases that could impact the river. Liability for that cleanup, should it be needed, should not fall on the property owners. If the plaintiff government agencies are confident that the solution they have agreed upon is indeed

protective of public health and safety for the long term, they should, in this CD or an appended document, grant immunity from future liability to all contaminated property owners. In addition, in paragraph 189, the CD specifically sites the right of contribution as one of the rights reserved by the parties against all others. Moreover, in paragraphs 194 and 195, the CD grants to the State of Massachusetts and the City of Pittsfield, the same contribution protection it grants to General Electric, should those entities acquire an interest in land that is the subject of this CD. Government agencies entered into negotiations that did not permit other interested parties to participate, then secured for themselves protection from liability while specifically preserving the potential for future liability of innocent property owners who were not allowed to participate. If forced to fund a cleanup under CERLA or MGL c.21, these property owners could not then seek contribution from General Electric. General Electric, however, can still seek contribution from them. Defending oneself is expensive; and where, as here, the polluter is being exonerated from future liability, there is no need for them to retain a right to contribution.

2. The Consent Decree does not appear to leave the agencies the flexibility they need to deal with inadequate cleanups or subsequent recontamination of residential and commercial properties. One of our longstanding concerns has been the use of widespread discrete testing to investigate fill that could have been deposited in very small areas but with high concentrations, and at shallow depths with clean material above. Our concerns have been borne out on two properties where homeowners, after their properties were "remediated," have found transformer parts while digging holes to plant shrubs or erect clothesline poles. CPR has, on several occasions, asked what will be done in these situations, in terms of retesting or further remediation and has never received an answer. We would like one now. Do the CD and the Administrative Consent Order (ACO) prevent the government agencies from taking administrative action on those properties ever again or would the post remediation discovery of evidence of contamination allow further investigation and cleanup? If further action against General Electric is completely foreclosed, then once again the settlement less the culpable party off the hook and shifts the burden to the innocent property owner in a way that is not in the public interest. Furthermore, for properties along the water bodies, Silver Lake, Goodrich Pond, Unkamet Brook and the Housatonic River, the CD and the ACO appear to preclude cleanup of recontamination. Again this shifts the burden of cleanup to innocent property owners who are unlikely to have the resources to undertake a cleanup while absolving the wealthy polluter. This is particularly problematic for properties along Silver Lake because the remedy selected for the Lake itself is suspect (see #8 below).

3. The liability relief granted to General Electric is unreasonably broad. The General Electric facility contains a vast number of chemical contaminants in, on and under the entire site. There is much more than PCB contamination to be addressed: Dioxin, Trichloroethylene, Benzene, and Toluene, to name a few, are documented as present. Much of this contamination will be here forever because of the agreement to "cap" some of the most contaminated locations and turn them over to PEDDA, as well as to leave Hill 78 in place. Under the CD, it appears General Electric will never be liable for cleanup of these areas in the future, even if they are impacting the river or may be found to be a greater health risk in the future than they are considered to be

today, and even though GE will do no cleanup initially. Since one of the primary arguments in favor of the CD seems to be that funding the cleanup could be problematic if we have to rely on government resources, we are concerned that the CD will put our community in the future position of being recontaminated and without the resources to cleanup. A grant of immunity from future liability for areas that are not being cleaned is overly generous and not in the interests of our community.

4. The Hill 78 Landfill poses an unacceptable risk. One of the elements of the proposed Settlement between EPA and GE that is most disturbing and unpalatable is the plan to locate a toxic waste dump IN THE MIDDLE of our city: surrounded by an elementary school, family neighborhoods, retail businesses, industries including the potentially volatile US Generating plant, Silver Lake, Goodrich Pond, Unkamet Brook, and our long-suffering river! The EPA and (MA) DEP have not conducted a thorough investigation of the contents of the General Electric landfill known as Hill 78; instead they propose to cap this landfill without ever obtaining that information. While the cap will be an improvement of the existing situation, it leaves an unacceptable risk. This landfill is not lined. There is apparently no paper trail to indicate what was disposed of in there. Without knowing what the landfill contains, EPA and DEP cannot possibly assess the impact of this solution's failure. They do not know what contaminates might be released or what impact those releases could have. While the agencies believe an "early warning" system of test wells provides adequate protection, we are well aware of other areas where the agencies were confident the existing array of test wells and borings provided adequate information, but were subsequently proven wrong. For example: 1) The plume under the Newell street parking lot was not discovered through early and fairly comprehensive testing; it took further investigation of a type that will not be performed on Hill 78 to locate the plume; 2) The plumes on the residential side of Newell Street were not discovered through initial testing; we were given repeated assurances that testing had been done and there was nothing to worry about; 3) Tests at the Pittsfield Municipal Landfill revealed nothing of concern, but a bulldozer attempting to cap the landfill uncovered barrels of toxic waste; a discovery that has yielded over 800 barrels of GE associated waste; 4) Dorothy Amos Park was tested and cleaned and found not to be impacting the river; had it not been for testing to attempt to establish background levels, the hot spot in the river next to the park would not have been located. The cap over Hill 78 and the test wells around it are not an adequate solution for a landfill adjacent to an elementary school and a residential neighborhood and which could potentially impact a "cleaned" river in the future. The worst part about this is that it will be designated as a "permanent" solution. Despite man's best efforts, the evidence that Mother Nature is relentless in her ability to destroy whatever man creates is all around us. Every homeowner knows the struggle it takes to keep one's property in good repair, especially the parts exposed to the harsh New England winters. Every gardener marvels at how the earth constantly changes, moves, evolves; rocks reappear yearly in flowerbeds that have been meticulously stripped of such. Roads and bridges crumble, majestic trees are felled, and monuments wear away. Even in this area we are not immune to tornadoes, hurricanes, even the occasional earthquake. The forces of nature are ongoing, permanent; landfills, dumps - 'though they may be humans' "state of the art" - are, at best temporary.

5. The Building 71 containment area is not an acceptable long-term solution for ridding our community of contamination when treatment is not only possible but also feasible from a cost perspective for this defendant. The CD also provides for a separate, lined landfill adjacent to Hill 78, known as Building 71 containment area. It will house higher levels of known PCB contamination. Not only have there been problems with other containment facilities in places such as North Carolina and Colorado where failures have occurred within two years of their construction, but also there are current technologies available that remove contamination from sediment, leaving clean sediment and allowing the contamination to be destroyed. We have a local business that has cleaned PCBs from other sites around this county. It has been estimated that treatment of PCB contaminated material in this case would cost about 40 million dollars. In fact, it is less than half of what General Electric paid Jack Welch in salary and bonuses (\$87 million) for 1999 alone. Clearly treatment is a feasible option for this defendant. Construction of the Building 71 facility, if it expedited the cleanup of Allendale School, was justifiable as a short-term option, but treatment should be evaluated, and periodically reevaluated as the long-term solution. We plead that the decree be changed to name these facilities as temporary and that a final time limit be set on the complete treatment of the waste contained therein. While we prefer immediate treatment, a maximum time limit should not exceed thirty years.

6. The cleanup options offered to the commercial property owners are inadequate and insulting. At public and other meetings with EPA and DEP, commercial property owners were promised repeatedly that the agencies would support their needs even though they themselves were excluded from the negotiations. But the CD gives these owners only two options, neither of which allows them to operate their business without the cloud of contamination impacting their operations. Neither option will allow them to engage in future construction or expansion without finding themselves in negotiations with General Electric and the regulatory agencies. Furthermore, while the banking community has pronounced itself more comfortable with the idea of lending money to these property owners, assurances that PCB contamination will not effect lending in the future have not been forthcoming. These property owners still may not be able to grow, alter or sell their business in the future. We are not proposing specific solutions to this problem, but instead insist that this portion of the CD be reconsidered in a process that includes the affected property owners.

7. Better investigation and cleanup of the "oxbows" is needed to protect the river from the risk of recontamination. Along the river in several places, are areas called "the oxbows," which were filled with General Electric facility "material" by the Army Corps of Engineers in the 1930's and '40's in an effort to straighten the flow of the river and reduce widespread area flooding. Again there is no paper trail of what materials were actually placed in these oxbows, but PCB laden fluids have been discovered and are being pumped from one of the oxbow areas. We ask for a complete investigation of these oxbows and that all cleanup options be considered, including treatment and removal. It is not logical to spend millions cleaning the river and flood plain properties and then leave them subject to potential recontamination because known areas of fill were not properly explored.

8. The proposed solution for cleaning Silver Lake is not credible. The proposed remedy for the multi-contaminated Silver Lake, as we understand it, is to place a sand cap on the bottom of the lake. We are not aware of any engineering to back up that proposal. From a layperson's perspective, however, we cannot believe that a sand containment layer can prevent recontamination of a spring fed lake while 3 layers of plastic liner are needed to keep contaminated particles from filtering up into the river.

9. Natural Resource damages are unreasonably low. The report by Industrial Economics estimated the maximum probable natural resource damages at well over 200 million dollars. The government has asserted that the uncertainty involved in proving those damages justifies settling for a reduced amount. It does not justify settling for approximately 10% to 12% of that amount.

10. The extent (lack) of cleanup is based upon possible overly optimistic science. As stated in our opening paragraph, CPR believes PCB's and the other contaminants found with the PCB's are a substantial health risk, as does EPA and DEP. However, standards and levels of cleanup, including decisions of how deep to excavate, levels of ppms in soil, water, and air, and even the concept of "averaging" levels of contamination to varying amounts dependent on usage are based upon a very complex science called "risk assessment." Our objections to many of the risk assessment conclusions are based upon the concept of environmental and human blood serum "background levels." We question whether the background levels cited for this settlement are a valid standard for this state, country and the world, in general, or are they higher and specific to what is "normal" in this area, in particular, based upon the long term, widespread contamination throughout Berkshire County and adjacent areas specifically from the General Electric plant. Numerous world wide studies support these suspicions, as well as evidence that even very low levels of contamination pose serious threats to the safety and well-being of certain populations, in particular the unborn and very young, most notably in the areas of hormone disruption, intelligence, behavior and learning capabilities. We suspect a long-anticipated study by an Expert Panel commissioned by the Mass Department of Public Health which we believe will confirm these health threats and will outline further toxin dangers has been inexplicably delayed beyond this CD Comment deadline. This Settlement should not be confirmed without this further scientific data and unless the calculations upon which it is based are verified, confirmed and validated as reasonable by recent and ongoing world-wide research.

11. The Citizen Coordinating Council has not enhanced citizen participation and the existence of that body should not influence the review of this settlement. Interested citizens groups were invite to participate in an enhanced public participation process through the Citizens Coordinating Council. The council has not enhanced participation, and in retrospect, its failure should have been anticipated. For many months the council meetings proceeded in the following fashion: a public member would make a comment which might be picked up on by some other public member but EPA, DEP or General Electric would not respond because they were bound by confidentiality rules of the ongoing negotiation. Clearly, a forum to enhance communication

cannot succeed where the parties who are charged with determining the solution are precluded from communicating. In addition, the single productive session of the council, concerning the remediation of the first half mile of the river, demonstrated strong opposition to a plastic lines being used in the river and that opposition was backed up by an expert from the Army Corp of Engineers who deemed it unnecessary. However, when the revised plan for the river was published it provide for not 1 but 3 layers of plastic lines. The public's concerns had been discounted without explanation and were clearly no more effective than if they had been made in writing and hadn't had expert support. In fact, because members of the CCC are volunteer activists with limited time to devote to reviewing the issues surrounding the cleanup of our community, the time spent on the CCC feels more like misdirection than enhanced participation.

In conclusion, we submit that this Consent Decree, as it is now written is solely in General Electric's best interests in terms of liability, and economic responsibility. It fails to protect the interests and principles of the general public and federal, state and local governments and their agencies, the environment, and the directly affected property owners and their communities for which it is intended. Therefore, we ask that substantial modifications be made in this document, as based on these comments, with many more opportunities for the interested public to submit effective input, or to, ultimately, go back to mediation with all affected and interested parties well-represented at the bargaining table for another effort at a more equitable and long-term public-protective outcome. We would honor the opportunity to have a representative of Citizens for PCB Removal appear before the Court for the purpose of addressing these comments and concerns.

(Taken from The Pittsfield Gazette, Inc. 2001)

APPENDIX C. Letter to Residents of Fill Properties from the Massachusetts Department of Environmental Protection

Residential Properties which may contain Contaminated Fill from the General Electric Company (GE)

Prepared by: The Massachusetts Department of Environmental Protection (DEP) in conjunction with The United States Environmental Protection Agency (EPA), together, "the Agencies" August 7, 1997 (contact information revised August 16, 1999).

Sampling

Q: If I request that my property be tested because I suspect GE fill to be present, what exactly happens next? What is the process that is put into motion?

A: If the Agencies find that there is credible information indicating that GE fill may be present on your property, the Agencies will require GE to approach you to request access for testing. GE will meet with you to gather information to develop an initial investigation plan. GE will ask that you sign an access agreement to allow GE to perform the required work. GE will submit a plan to the Agencies that details their planned investigation for your property. The Agencies will review the plan and approve it (possibly with conditions) and you will be notified by GE before sampling begins. In approximately 45 days from the Agencies' approval of the sampling plan, you and the Agencies will receive a report from GE that discusses the results and proposes next steps, if necessary.

Q: Who determines which properties are tested, and how is this determined?

A: The Agencies determine which properties are tested and have established criteria for screening. These criteria include information on the source of fill, physical evidence of fill, anecdotal information regarding GE fill, etc. Additionally, for each property where PCBs are detected, a complete property survey is conducted by GE to determine the extent of fill. If there is any evidence that the fill may extend beyond the property boundaries, neighboring properties are subsequently tested (under the process described above) and continue to be tested until the extent of fill in the area is defined.

Q: Who decides where the sampling locations are and how many samples are taken?

A: GE proposes a plan containing proposed sampling locations based on the information available about a specific property. The property owner and the Agencies each receive a copy of the proposal. The Agencies review, comment and approve the plan before work begins. Typically, the Agencies initially require a minimum of three borings in areas of suspected fill. If contamination is found, a sampling "grid" is established which dictates

the locations of surface soil samples and additional borings. Typically, the sampling grid results in a sampling location every 25 feet.

Q: If GE tests my property and finds no PCBs, but finds other contaminants not related to GE, what happens then?

A: The problem may still need to be addressed. Whether the contamination is addressed and who is responsible for addressing it is dependent on many facts, such as origin, type, quantity, concentration and location of contamination.

Q: Why are monitoring wells required on some of the properties?

A: An extensive investigation of a contaminated property includes an evaluation of possible impacts to ground water. The Agencies requires use of monitoring wells on all properties with extensive contamination. Some of the contaminants that have been found on some properties may impact groundwater, if present in sufficient concentration.

Q: My neighbor knows he has GE fill on his property, but is afraid to come forward. He says he doesn't want to know whether the property is contaminated. Can the Agencies investigate this without disclosing how the information was obtained? If the Agencies say that someone provided the information anonymously, he'll know it came from me.

A: The Agencies have received several anonymous tips that have led to sampling. No sampling has occurred without a property owner allowing access. We will work with the homeowner to allow access to GE to compete sampling. If there is fill on a property, several people may have knowledge about it: the source(s) of the fill, the property owner at the time of filling, neighbors in the area at the time of fill, the truck drivers and personnel who hauled, loaded and unloaded the fill and other people in the neighborhood may have spoken about it. If you choose to remain anonymous, the Agencies will honor your request.

Q: How do I obtain a copy of the test results for my neighbor's property?

A: While we respect the privacy of the homeowners to the degree allowed by law, the sampling results and related information is public. Currently, the data and reports are not in the local information repositories. However, the data are presently available for public review at the DEP office in Springfield, as it is with all hazardous waste sites, every Wednesday from 9 - 12, and 1 - 4. You should call ahead (413-784-1100) to ensure that that there have been no changes in schedule. The residential fill properties are filed under their tax parcel identification numbers. However, the repositories will contain information regarding the residential fill properties on or before September 1, 1997. The repositories are listed at the end of this document.

Additionally, if contamination on your neighbor's property extends to your property boundary, you will be notified directly and requested to allow access to your property to determine if the contamination extends beyond the parcel boundary onto your property.

Q: What about those of us that live within the neighborhoods where there are properties which contain fill from GE; will sampling of our properties be performed so we don't have to convince future buyers (of our properties) that our properties are not contaminated? Will we have something in writing from the DEP or EPA explaining why our properties aren't sampled?

A: No wide-scale sampling is planned at this time. We are investigating and will investigate properties where, based on credible information, GE fill may be located. For each property where PCBs are detected, a complete property survey is conducted by GE to determine the extent of fill. If there is any evidence that the fill may extend beyond the property boundaries, the neighboring properties are subsequently tested and continue to be tested until the extent of fill in the area is defined. However, if there is no sampling performed at a property, there will not be something in writing from the Agencies, but we are always available to answer questions from homeowners and prospective homeowners.

Q: Why doesn't GE just sample the entire neighborhood where PCB-contaminated fill has been found?

A: Sampling must be based on reasonable basis and credible information suggestive that there may be a problem related to GE fill.

Q: What assurances can I give to parents that it's safe for their children to be here unless some soil testing is done? **(From children's daycare facilities within neighborhoods containing GE fill.)**

A: The contamination we are encountering in fill does not move from the soil of one property to the soil of another. PCBs and related contamination from GE is associated with certain conditions, such as fill on a property, or property location within the 5-year floodplain. You may want to determine who owned your property in the past and inquire whether they have any information about fill or other relevant conditions.

Even if you have fill on your property, it may not be PCB-contaminated fill. If you have questions, you should consult with the Agencies to determine if the situation warrants sampling.

Q: How long does it take to obtain the sampling results?

A: Sampling results are typically obtained within four (4) weeks of sampling. The process involves collection of the sample and subsequent laboratory analysis, preliminary

reporting of results, and then the incorporation of the final laboratory results into a report that interprets the importance of the data and proposes additional work. All of this work is being conducted as quickly as possible. The Agencies consider four (4) weeks to be fast for this type of work. Additionally, given that several properties are being investigated all at once, the Agencies and GE have agreed to prioritize investigations based on the likely exposures and extent of contamination.

Q: If I change my mind about having my property tested now, can I expect GE to sample it sometime in the future, when I decide I want to sell my property?

A: Not necessarily. From the Agencies' perspective, now is the best time to determine if your property is contaminated, if you have reason to believe that it may be. If you have reason to believe that there may be contamination on your property, the Agencies encourage you to come forward now. There are no assurances that the Agencies will require GE to investigate your property in the future unless there is credible evidence indicating that GE fill is located on your property. Also, once you are aware that there may be contaminated fill on your property, your awareness may initiate the "statute of limitations," which gives you a set period of time to pursue any legal claims you may have.

Q: If I decide that I don't want my property tested, am I responsible and/or liable for what may be on the property? Would I have an obligation to a future buyer to disclose that I had originally requested that my property be tested, but then changed my mind?

A: Whether you are liable for any contamination on your property depends on the type, concentration, quantity and location of contamination, as well as when the property became contaminated, when the release occurred, and who caused the contamination.

You may have an obligation to disclose known conditions on your property if asked, but you should talk to an attorney or real estate agent for advice.

Remediation

Q: Will all the contaminated fill be removed from the property?

A: The remedial action that the Agencies will approve is dependent upon site-specific circumstances, including whether the home is placed on fill, the structural integrity of the home, the depth of contaminated fill and the type and concentration of contamination at depth. In some cases, not all contaminated fill will be removed. The Agencies must ensure that the contamination on a property poses no significant risk to human health or the environment. The Agencies also require an evaluation of the feasibility of achieving background levels at a property.

Q: How deep will GE be forced to dig in order to remove contaminated fill? And will this depth vary depending upon whether I decide to keep my property or sell it to GE? If there is a difference, why is there a difference?

A: Remedial actions may be different for each contaminated property, depending on the extent and type of contamination and structural constraints on removal. A site-specific evaluation will be conducted for each property. The extent of removal may also differ if an "activity and use limitation" (such as, a deed restriction that limits uses that occur on the property) is placed by the property owner. Any activity and use limitations which a property owner proposes as part of a cleanup would require approval by the Agencies. GE's purchase of a residential property could affect the depth of removal if GE places an appropriate activity and use limitation on the property, but would not change the requirement to achieve no significant risk.

Q: GE has asked to buy my home. If I decide to stay at my property, can I be assured that GE will remove any contaminated fill from beneath my house?

A: No. If there is contaminated fill beneath your home, depending on the risk, location, structural feasibility and cost, the Agencies may not require, and it may not be possible for, removal of contamination from beneath your home. However, the Agencies will require GE to investigate whether, and to what extent, there is any health or environmental risk (if any) posed from contamination beneath a building.

Q: When will GE start the cleanup? How long will the cleanup take once started?

A: Each property is at a different stage of investigation and not all properties that will be investigated will require cleanup. For those properties that are highly contaminated and furthest along in the investigation process, it is the Agencies expectation that the cleanup will begin this construction season. The duration of the cleanup will depend on the size and difficulty of the cleanup (the area and extent of contamination, the depth of the soil to be removed and any structural constraints that may affect the process, such as moving the home, placement of reinforced sheeting to allow removal, etc.)

Q: Will my family and I have to move during the cleanup? If so, would someone pay for that?

A: The need to move during remediation may be necessary or preferable during the remediation of some properties. This is dependent upon many site-specific factors such as the extent of remediation, types of contamination, location of any necessary removal action in relation to your home, and many other factors. GE has expressed a willingness to work with the homeowner involved to handle any temporary relocation issues, if necessary.

Q: If GE buys all these residential properties, does that mean they can just put up a fence and leave these properties as such, and not have to clean them? What does GE plan on doing with the properties they purchase?

A: If GE purchases the property, it has expressed its intention to remediate the property to allow intensive recreational use consistent with the residential character of the neighborhood, without the need for fences. This would include remediation of the surface soil (where the most intense exposures occur), as necessary, to allow for safe use. However, as with any property owner, GE would have the right to fence any or all portions of its property; but, any such fence would not be necessary for restricting exposures, nor would it be required by the Agencies. GE has stated its intentions that other than as temporary measures, it does not intend to fence or pave properties in residential neighborhoods.

Q: If GE makes these properties into parks or recreational areas, is this okay with DEP and EPA?

A: If there is a sufficient cleanup, this would be acceptable to the Agencies. If the plan is to make these properties into parks or recreational areas in order to have a more limited removal effort, this is an option, but not one that has GE's proposal and feasibility evaluation in such a case. The feasibility evaluation must include an evaluation of the feasibility of achieving background.

Nature of Contamination

Q: What does GE fill look like?

A: The look of GE fill is highly variable. However, the presence of non-native soil objects, such things as scrap metal, broken porcelain insulator parts, wood block flooring, etc., often appears in fill from GE. Additionally, some people have reported problems with the growth of vegetation. However, we have no reason to believe that poor vegetative growth alone indicates the presence of GE fill. However, we have no reason to believe that poor vegetative growth indicates the presence of GE fill. Materials that are solely consistent with residential garbage (cans, bottles, etc.) or construction debris (nails, bricks); when present alone, are not strong indicators of the potential for contamination.

Q: How can you explain finding 20,000 ppm on one property, and not find anything on another property just 10 feet away?

A: The contaminants in the fill are not evenly distributed on a property. Such high levels, like 20,000 ppm may be indicative of formerly-saturated materials that have bonded to soils or fullers earth. Fuller's earth is an absorbent clay-like material that was used in filtering Pyranol and used in absorbing spills. The contamination is bound to the soil it

has contaminated and the soil does not travel across a property, or from one property to another.

Q: What other kinds of contamination are being found besides PCBs?

A: Contaminants other than PCBs, detected at some properties, at levels of concern include semi-volatile organic compounds, metals, dioxins and furans.

Q: When the streams/creeks near the contaminated properties overflow/flood, does that cause the PCBs to get to my property?

A: It may. It is dependent on the amount of sediment in the creek or stream, the presence of PCB contamination in the sediment and the level of that PCB contamination. The Agencies are currently requiring GE to investigate the extent of contamination in sediment and adjacent bank soils.

Q: Why are the Agencies not concerned about PCB concentrations below 2 ppm?

A: Statewide, DEP has established a generic or general default cleanup level of 2 ppm for PCBs for residential use. Average PCB levels below 2 ppm are not considered to pose significant risk for residential use. A site-specific risk assessment may be conducted for a site which may result in slightly different cleanup value.

Q: Do PCBs move through the soil?

A: PCBs, by and large, do not migrate through subsurface soil. Two important physical characteristics of PCBs are that they tend to cling to soil particles and that they do not dissolve easily in water. This means that PCBs are not moving around underground, but will remain where they were placed.

Health Concerns

Q: I've worked at GE for over 20 years, and have lived on this property without exhibiting any adverse health effects; so why should I consider leaving or selling my property, or changing my daily outdoor routines? **(From a property owner with high levels of contamination on property)**

A: While we cannot predict whether someone who has been exposed to PCBs will experience an adverse health effect, we do know that every exposure can increase the body's burden of PCBs. DEP and EPA have recommended several actions you may take if you would like to reduce your exposures to PCBs - until the time a final cleanup is complete. These are listed in the PCB Fact Sheet.

Q: A few people in my family who lived on this contaminated property have died from cancer; is their death from cancer related to the fill on the property?

A: It is difficult to determine whether a person's cancer was caused by PCB exposure because there are so many people who get cancer and so many causes of cancer. The risk that a person will develop cancer in his or her lifetime from any cause is about 1 in 3. We do know that laboratory animals that were fed PCBs developed liver cancer. However, studies of people exposed to PCBs, including workers exposed to high levels of PCBs, have not provided definitive evidence that PCBs cause cancer in humans. The PCB Fact Sheet provides more information about the potential health effects from PCB exposures and provides recommendations about ways to minimize potential exposure.

Q: How do I know if I've been exposed to PCBs?

A: There are tests to find out if PCBs are in your blood, body fat, and breastmilk. Because PCBs are found throughout the environment, nearly everyone is likely to have some measurable amounts of PCBs in their body, whether or not they live in Pittsfield. In the United States, average PCB levels in blood among people who have not had exposure in the workplace range from 4 to 8 ng/mL (parts per billion). Elevated levels of PCBs in comparison to the general population will show that you have been exposed to PCBs. The tests do not determine the source of your exposure, the exact amount or type of PCBs you have been exposed to, how long you have been exposed, or predict whether you will develop harmful health effects. If you do not have elevated levels of PCBs in your body, it is very unlikely that you have an increased risk of developing harmful health effects compared with the general population.

Blood tests are the easiest and safest method for detecting recent exposures to large amounts of PCBs. If you are concerned and want to find out whether you have been exposed to PCBs, you should contact your doctor.

For additional information, contact:

J. Lyn Cutler
Massachusetts Department of Environmental Protection
436 Dwight Street
Springfield, Massachusetts 01103
(413) 755-2116

OR

Adam Wright
Massachusetts Department of Environmental Protection
436 Dwight Street
Springfield, Massachusetts 01103
(413) 755-2292

OR

Bryan Olson
United States Environmental Protection Agency
JFK Federal Building
One Congress Street
Boston, Massachusetts 02203
(617) 918-1365

INFORMATION REPOSITORIES

To provide Berkshire County residents with easy access to information relevant to the investigation and cleanup of the Housatonic River and GE Pittsfield sites, EPA and DEP have established Information Repositories at the following locations:

Berkshire Athenaeum Public Library, Pittsfield, (413) 499-9488
Berkshire County Regional Planning Commission, Pittsfield, (413) 442-1521
Lenox Public Library, Lenox, (413) 637-0197
Simon's Rock College of Bard, Great Barrington, (413) 528-7274

All repositories contain official correspondence; Scopes of Work, and reports and documents regarding the sites. Information is sent to the repositories as it becomes available.

(Taken from EPA New England's Website 2001)