



LESSONS LEARNED

About Superfund Community Involvement

EPA Superfund Response Staff Tell How
Public Involvement Has Helped Clean Up Sites

October 2009

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Introduction

The tales you are about to read are REAL. The names of the people involved have not been changed because we want to recognize their achievements. These are SUCCESS stories about how your colleague RPMs, OSCs, and CICs have overcome obstacles, inertia, opposition, and mistrust in the communities where they were doing Superfund cleanups. In reading these tales you may find yourself nodding in amazement or agreement. You may also find yourself feeling that these cases are the aberrations. Your own experience may suggest that the approaches described only work in special circumstances. But then, that's what many of the tale tellers thought too, before either outside circumstances, blind luck, or a flash of inspiration got them to work on a program of meaningful community involvement. In any case, these tales should challenge you to reflect on your own understanding and practice of public participation. You probably will learn something useful. And at the very least, these tales will give you a few minutes interesting respite from the stress of your work day.

Key Lessons Learned

Community Involvement Improves Decision Quality

- The community task force made a “significant contribution” to the clean-up effort. (Ed Als, Region 2 RPM for Li Tungsten)
- Significant community involvement in the risk assessment led to a better product and increased public confidence in the project. (Fred MacMillan, Region 3 RPM for Palmerton)
- Getting the public more involved is “the right thing to do and will usually lead to better decisions.” (David Page, Dept of Energy RPM for Poplar Creek, Region 4)

Build Relationships

- “Hang around” in the community and interact with people routinely to show that you are sincerely interested in their welfare. (Mike Holmes, Region 8 CIC for Leadville)
- Be visible and available. Seek out opportunities to meet with community members during their normal activities. Always find the time to answer questions and listen to concerns. (Paul Groulx, Region 1 OSC for Johns-Manville)
- Persist in building relationships and proactively reach out to break through community suspicion and opposition. (Mary Kay Voytilla, Region 10 RPM for ASARCO)
- Engage in meaningful dialogue and you will minimize delays from public misunderstanding and criticism. (Ed Als, Region 2 RPM for Li Tungsten)

Be Proactive

- “If we had proactively gotten the community involved, we would have built trust initially. Instead, we waited for the community to come to us and by that time they already distrusted us.” (Noemi Emeric, Region 5 CIC for Michigan City)
- “Regardless of how good a solution is, it cannot be implemented without getting people on board.” (Michelle Pirzadeh, Region 10 CIC for ASARCO)
- Providing the community with early drafts of technical documents is worthwhile in the long run. (Mark Doolan, Region 7 RPM for Jasper County)
- Ask for help. If you sincerely seek information or support from a community you will almost always get something worthwhile. (Donn Walters, Region 6 CIC for Hudson Refinery)

Plan Ahead

- “Learning what the citizens are thinking far in advance of the development of the proposed plan is a tremendous advantage.” (Tony Able, Region 4 RPM for Poplar Creek)
- Take the time to anticipate public concerns and likely reactions and develop effective involvement strategies. (Andy Bain, Region 9 CIC for Del Amo/Montrose)

Cooperate and Collaborate

- The sooner you reach out the better. You will be more successful with “early, humble coordination.” (Rita Engblom, Region 6 RPM for Hudson Refinery)
- “If it wasn’t for CIC Andy Bain, a genuine partner, I would have given up.” (Cynthia Babich, community activist, Del Amo/Montrose, Region 9)
- Be willing to shed your own preconceptions and to listen to and learn from your critics. Share ownership, responsibility, work and credit. (Fred MacMillan, Region 3 RPM for Palmerton)
- Tremendous gains can be achieved by partnering with community leaders to engage the public. (Noemi Emeric, Region 5 CIC for Michigan City)

Communicate Clearly

- Frequent open and honest communication fosters a high level of trust and cooperation. (Mark Doolan, Region 7 RPM for Jasper County)
- You will be most successful when you regularly interact with the community and proactively share information in an understandable way. (Paul Groulx, Region 1 OSC for Johns-Manville)

Be Creative

- Don’t be afraid to go beyond the traditional community relations approach. Adapt your style and activities to the community. (Mike Holmes, Region 8 RPM for Leadville)

Putting the Responsibility on the Community in Nashua New Hampshire

From 1900 to 1985, the Johns-Manville Company operated an asbestos building-product manufacturing facility in Nashua, New Hampshire. The City of Nashua condemned the buildings in 1994. Fire Chief Mike Buxton brought in EPA because an abandoned building was leaking PCBs and there was a risk of fire. Many homes, schools, a hospital, and elderly and low-income housing developments are close to the site. EPA On-Scene Coordinator (OSC) Paul Groulx encouraged the City to participate and they ended up offering funding and other valuable resources for this cleanup.

The site was politically complex. Dennis Pinski of the New Hampshire Department of Health and Human Services says EPA reconized this and, “did a tremendous amount of planning and preparation from the outset. EPA was committed to involving the city and the public from day one.” EPA called a meeting with stakeholders selected by the city. Groulx suggested that the community organize a task force to help plan the cleanup. He convinced them that the site was their problem, not EPA’s, and it was up to them to decide how to proceed. Paul Groulx “worked for the community,” according to Liza Judge, who had been t he Community Involvement Coordinator on site. He saw it as his job to keep people informed and get their buy-in. Groulx says. “A lot of effort was expended up front to give them their stake in the effort and get them up to speed. I empowered the community without giving the store away.”

Approximately 50 community members joined the Citizen’s Task Force. According to Suzanne Simon of Agency for Toxic Substances and Disease Registry (ATSDR), who assisted OSC Groulx with outreach programs, “the Citizen’s Task Force was expected to interact with the EPA, not be locked in battle. Paul Groulx engaged them from the start. He listened and built a foundation based on communication.” Lisa Judge adds, “Paul was dedicated to getting to the heart of what was bothering people.” We “helped them come to consensus on how to communicate with each other. They learned to be clear and concise, and documented what happened at each meeting, though it was time consuming,” according to ATSDR rep Simon.

This was critical to the development of trust. Bonnie St. Pierre, who chaired the Citizen’s Task Force says that the interested support of Paul Groulx was critical. “We were babes in the woods and not very political. Region 1 helped us along. They welcomed us and explained why we were important. We never felt like outsiders. We worked side-by-side with EPA. EPA was not the enemy, it was there to help us. They told us which meetings were key to attend. They taught and guided us with questions like ‘What is your goal?’”

“Everyone had the same mission, goals and willingness to keep to the agenda. It was a group of good workers”, said Bonnie St. Pierre. “Everyone tried to be there and work things out. Some problems did occur in the beginning and they were worked out s uccessfully offline,” according to Suzanne Simon. When asked if there was total agreement among stakeholders, Bonnie St. Pierre noted that the Citizens Task Force listened to minority voices. They worked around problem people and would not permit them to take over meetings. One member was negative

and suspicious of the government. The other members told him that they would address his concerns one-to-one after the meeting. They gave him a special assignment to collect data to support his beliefs.

At first, EPA held public meetings for residents. These never were very well attended. EPA found it was better to invite community members to come by the site. Groulx was in the trailer the same hours every day. Wednesday night was Open Trailer Night with coffee and cookies. Community members appreciated Paul's availability, interest and responsiveness. Among other things they said: "He always made the time to answer questions and listen to complaints." "He never shied away from face-to-face forums." "He was devoted to the site." "The mission and trust communicated by OSC Groulx permeated all the local groups." Task force members describe him as exceptional and upbeat -- having integrity and openness. Suzanne Simon believes "the lead EPA person on a site really sets the tone for how the community works with other agencies."

EPA's initial work plan called for demolition and burial of waste on the property under a cap. Ultimately the Task Force found it would be more prudent to remove everything and avoid land use restrictions and perpetual monitoring. EPA and the state worked hard to make the community's recommendation work. "The site team had an ambitious, yet realistic plan and battle cry of 'ahead of schedule and under budget,' and they did it," according to Dennis Pinski. EPA, the State and the Task Force organized a successful media event after the demolition to announce the elimination of a serious threat. At the end of the project, the residents held a picnic and made mugs to celebrate the cleanup.

"That Task Force is the most impressive thing I've seen," said Rod Turpin of EPA. As the project moves into a new phase, Fire Chief Buxton (who gave a professional paper on the success of the site) brought in a sign announcing "The Partnership Continues." According to Suzanne Simon, "for me this site was one of the highlights of the last seven years. I never felt more part of a team."

Lessons Learned:

Plan Ahead. The better the plan, the better the project. Anticipate problems. Get community members involved and working together and with you from the outset.

Ask For The Community's Help. Members of the community will have valuable information, ideas, and energy. Explain that while you care about eliminating the threats and getting the site cleaned up, it is the community that has the most stake in the outcome and that its members will need to get involved and have sustained participation if the project is to be a success.

Communicate! Communicate! Communicate! You will be most successful when you regularly interact with the community and when you proactively share information, good and bad, in a way that community members understand.

Be Visible and Available. Seek opportunities to meet with community members during their normal activities such as neighborhood events, fairs, or PTA meetings. Be patient and leave time to answer questions. Be informal and avoid acting in bureaucratic ways.

Early Involvement Makes a Real Difference at the Li Tungsten Site

The Li Tungsten cleanup is a good example of how early and meaningful public involvement can lead to a better cleanup. Unlike at most other National Priorities List (NPL) sites, the Glen Cove, New York community around the Li Tungsten NPL site played a substantive role in planning for the cleanup. The Li Tungsten Superfund Site Community Task Force was organized in 1993, prior to the initiation of the remedial investigation (RI) to test the effectiveness of early community involvement in the Superfund cleanup process. The Task Force provided assistance and valuable input to EPA on the best approach for dealing with soils, sediments and ground water contaminated by forty years of tungsten products manufacturing. The Task Force, which over time varied in size from 15 to 25 members, represented residents, business interests, local environmental organizations, potentially responsible parties, including the site owner, and local and state governments. It convened once a month to talk with EPA about the site, to offer relevant data and information about community needs and prospective uses of the property, to review and comment on site-related documents and proposed actions, and to help EPA select the most appropriate remedy. Remedial Project Manager (RPM) Ed Als says that the Task Force made a significant contribution to the clean-up effort, primarily through early scoping of issues and dissemination of information to the community.

One of the first actions of the Task Force was to form a technical subcommittee to review and provide input on the interim remedial action (IRA). The IRA was necessary to eliminate site clutter and dangerous conditions so the remedial investigation could proceed. During this review the Task Force stressed the importance of “quick tracking” the site cleanup. With this impetus, EPA began procurement of the RI subcontracting concurrently with the ongoing IRA activities. This meant the RI contractor would be ready to start as soon as the IRA was complete.

The Task Force devoted a substantial amount of time to assessing desired future land uses. The site borders Glen Cove Creek, which ultimately empties into Long Island Sound. The nearby City of Glen Cove was considering a number of redevelopment options, including restoration of its waterfront. So determining how the site might be utilized after the cleanup and how its use should fit into other plans for the surrounding community was of paramount importance. With the assistance of an able facilitator and technical advisor, the Task Force became very familiar with the Superfund “process” and provided inputs and recommendations to EPA about what should be done with the site. The RPM believes that the Task Force involvement improved the quality of the RI Report and substantially influenced EPA’s feasibility study deliberations.

Ed was skeptical at first about the atypical, expanded level of public participation that was tried at this site, especially the development of the Task Force charter, which included a significant set of rules regarding meetings and membership. He thought the group was likely to get bogged down in formality and possibly even subtract rather than add to the cleanup process. While he still feels that the group met more often than was really necessary in the first two years, overall it has been a positive force. A large measure of credit belongs to two capable co-chairpersons and several “core” members who have worked reasonably and diligently with EPA. Given a meaningful role to play, they have come to appreciate the big technical, legal, and financial issues and have helped the rest of the community better understand EPA’s actions as well as its limitations and constraints.

Lessons Learned:

- **Start Early.** Formation of the Task Force at the outset allowed the membership to see the Superfund process from beginning to end, which greatly reduced the misunderstanding that leads to distrust and lack of community cooperation.
- **The Public Has Useful Knowledge.** The risk assessment was improved because of the Task Force’s input on how the property had been used and the anticipated future land uses. The Task Force’s discussions and input on future land use provided a good foundation for site planning and decision making.
- **Reach Out.** Be willing to take time and even go out of your way to keep the community informed. Engage in ongoing meaningful dialogue and you will minimize delays from public misunderstanding and criticism.

Fear Mongering Gives Way to Fact Finding in Palmerton, Pennsylvania

The Palmerton Zinc Superfund Site consists of a community of 5,000 in a valley sandwiched between two former zinc smelting plants. From 1898 to 1981 operations from these plants resulted in 2,000 acres of denuded mountainside, a 2 ½ mile long “Cinder Bank” composed of more than 30,000,000 tons of smelter residue, and contaminated ground water and surface waters.

The history of EPA in Palmerton is rife with controversy, much of it from the potentially responsible parties (PRPs) themselves and well-organized splinter groups. EPA long endured accusations concerning its agenda and expertise. And there was copious anti-government rhetoric and assertions that the contamination in Palmerton was not associated with past or present industrial practices, but instead was the result of lead paint, gasoline, cigarettes, etc. One of the PRPs even threatened to sue Palmerton residents that cooperated with an EPA-sponsored interim cleanup of homes.

Following a three-year effort culminating in 1994, EPA successfully “fingerprinted” the hazardous metals contamination, proving its overwhelming industrial origins. The information was irrefutable. Rather than using these results as a club, EPA used them to reach out to its critics and supporters alike and involve them in the next step of the process, the risk assessment.

The same day the chemical fingerprinting data was released, EPA invited all stakeholders to provide input to what would become one of the most complicated risk assessments the Agency had ever undertaken. Within weeks, community members and others submitted good ideas on how to approach the risk assessment and helpful information about things such as housecleaning practices, resident longevity, and land use practices. All of this input was ultimately used in and helped strengthen the risk assessment.

Not long after EPA’s invitation for ideas and data, a PRP-funded community group, the Palmerton Environmental Task Force (PETF), offered to conduct the risk assessment. EPA said this would not be possible, but extended the group an invitation to participate as colleagues in the process. Fred MacMillan, the Remedial Project Manager (RPM), coordinated the effort for EPA and arranged for regular meetings between PETF, the PRPs, and EPA’s risk assessment professionals. These meetings were held on a rotating basis in the Region’s offices in Philadelphia and in Palmerton every two weeks for almost two years. It was a very open process. Data, methodology, issues and concerns were all freely shared and discussed. PETF members took minutes of the meetings and published a newsletter to explain the process and keep the community informed about the group’s progress. Despite individual agendas, which

still surfaced occasionally, the risk assessment itself was handled in a collegial fashion. A noteworthy example was the group's agreement on the need for "bioavailability studies" for lead. Bioavailability studies help determine how much of an environmental contaminant like lead in soil is actually absorbed from exposure (e.g. ingestion). Fred arranged to have soils from Palmerton dovetailed into a bioavailability study in progress at EPA Region VIII during the course of the risk assessment. One of the PRPs helped EPA gain access for sampling and provided necessary laboratory pre-screening of the soil samples used in the bioavailability study.

The exchange of technical data was so complete that both EPA and PETF had sufficient information to "crunch the numbers" to determine risk levels for contaminants of concern. EPA then shared a preliminary draft of the risk assessment with the PETF and the public. This led to additional input that resulted in some valuable corrections to the data. By involving members of the community in the actual work of the assessment, EPA not only gained helpful information, but also established a high level of public confidence. No one complained about the process or felt blind-sided by the results. Although not everyone was pleased with the conclusions of the risk assessment, no one felt left out of the process.

EPA and the Palmerton community gained far more than just a completed risk assessment from this exercise; things like a better understanding of people's misgivings about a very technical process that affects them, a greater respect for EPA use of that process to ensure protectiveness, and perhaps most important, a sense in each of what is important to the other. A few things did get lost along the way, like some distrust and preconceptions. Nobody missed them.

Lessons Learned:

Don't Ignore Community Involvement. Increased public /stakeholder involvement is here to stay. Don't run from it, manage it! If you communicate with all parties openly, early and often you will be more successful and have fewer headaches.

Be Organized. Help the community to establish and manage a coordinating committee. Make sure the group has clear goals and good ground rules. Explain constraints. Establish a schedule, but be flexible in providing additional time to develop community acceptance.

Let Go of Your Ego. Be willing to shed your own preconceptions and to listen to and learn from your critics. Share ownership, responsibility, work and credit.

East Fork Poplar Creek Cleanup

Public Participation Helps Save \$160 Million

During the 1950s and 1960s, the lower east fork of Poplar Creek in Tennessee was contaminated with over a quarter million pounds of mercury from the production of nuclear weapons at the Oak Ridge Reservation. When the Department of Energy (DOE) began to plan the cleanup in 1993, its preliminary estimate was that the project would cost \$168 million. Four years later, a proposed remedy costing only \$8 million was selected. Public participation was crucial in achieving this \$160 million savings according to the DOE Program Manager, David Page.

Early in the planning process, DOE set up a citizens working group (CWG) that played a major role in the remedy selection process. Thirty-one people volunteered to participate (everyone who indicated an interest was included in the CWG) with the understanding that there would be a meeting a month over an extended period of time. Because of the CWG members' interest and involvement, the group actually met almost every two weeks for fourteen months. Early on, the CWG asked insightful questions and pushed DOE to justify assumptions about exposure, toxicity, cost, and cleanup impacts. This led DOE to reconsider the threats posed by the type of mercury that was present and a revision of the proposed cleanup level from 50 parts per million to 180 parts per million. Subsequently, the cleanup level was once again revised to 400 ppm. This occurred because the CWG, not the government, developed a persuasive case that the reduction of risk to human health and the ecosystem did not justify the expenditure of tax dollars necessary to achieve the more stringent cleanup level.

David Page says that getting the public more involved is “the right thing to do and usually will lead to better decisions.” He believes that even without such substantial dollar savings, the \$250,000 that DOE spent on community involvement work would have been worthwhile in terms of citizen goodwill and satisfaction with the outcome. Tony Able, the EPA Remedial Project Manager who partnered with David Page, agrees that more community involvement earlier in the process is a real asset. He says that “learning what the citizens are thinking far in advance of the development of the proposed plan is a tremendous advantage.”

Lessons Learned:

- **Don't underestimate the value of public input.** Even in the absence of technical expertise, citizens have ideas and perspectives that can make a real difference in the success of the cleanup.
- **Develop trust.** Openness on the part of the government plus ownership through involvement of the community establishes the trust that enables better decisions to be made.

Successful Partnering with a Community Leader in Michigan City, Indiana

After a ten-year process, the Waste Inc. Site in Michigan City was finally cleaned up in 1997. The community involvement effort at this former municipal landfill was complex due to high levels of distrust. When EPA began work, the Army Corp of Engineers was completing a dredging project adjacent to the site. The community was upset with the way the dredging was handled and also because no community members were given an opportunity to participate in the decision-making process. Unfortunately, the EPA site team when the project began refused to discuss with the residents their concerns about the dredging project -- "a big mistake" according to Remedial Project Manager (RPM) Dion Novak. This situation was complicated by the extensive number of potentially responsible parties (PRPs). Many of these PRPs were small businesses who were angry because they did not understand why they should be held liable for following accepted practice for routine disposal of their wastes.

Save the Dunes, a local organization, sued to get the site cleaned up. According to its Executive Director, many PRPs (including the City and politicians) were in collaboration to delay the cleanup. The local newspaper, a PRP, did not publish the notice of a 30-day review period for the consent order until the review period was over. To compound this error, EPA said that if the residents still wanted a 30-day comment period, which is not legally required, it would delay cleanup. This upset the community, even though the Region's intention in providing the review had been to improve its relations with the public.

One of the things that helped begin to turn the situation around was when EPA formed a partnership with Danielle Livinghouse of the LaPorte County Health Department and Rhonda Lee of the local Minority Health Coalition. Lee began to work as a community leader, assisting EPA by identifying interested residents and other key stakeholders, and communicating with the community, particularly hard-to-reach citizens. Soon the distrust started to fade.

Community Involvement Coordinator Noemi Emeric worked closely with Rhonda Lee and kept her fully briefed on EPA's evolving plans for the site. In turn, Lee helped Emeric to better understand the community's needs and ways to communicate effectively with it. Emeric also helped to prepare Lee for her leadership role. Rhonda Lee reports that she received valuable training that made her a better liaison. She began to advertise and host meetings, go door-to-door giving out flyers, and invite EPA as her guest. She used her own personal experiences to make information understandable and user-friendly. The working relationship between EPA and the community steadily improved.

Further gains were made through informal get-togethers, where key players got to know each other as people. Prompt responses to phone calls, letters, and other community concerns were all keys to building trust. The partnership organized an appearance on a local talk show with the county health department and local emergency planning agency to discuss site activities and progress.

EPA looked for opportunities to involve the public in decisions at all levels. For example, when a "No Fishing" sign was needed at the site, the Region asked the community to design it. When the remedy was selected in 1994, EPA sought input from the community and incorporated many comments into the ROD. These included adding a contingency to contain deep ground water at the site, removing an underground storage tank, improving site security, and using a synthetic cap, rather than one made from natural materials.

After the cleanup was completed, the site team worked with stakeholders, including the PRPs, to host an open house to celebrate the success of the partnership. The Mayor and EPA staff described the clean-up efforts to a group of elementary school students. This included photographs of the cleanup and a site tour for the students. The local newspaper, radio and television stations documented the event. "The celebration was a great opportunity to applaud the community's involvement and efforts," according to Emeric.

In the end, everyone was working cooperatively together toward the same goal. The community groups felt EPA learned to listen and changed its perception of the value of public involvement in the project. The Region "operated in good faith and kept [its] word" said Danielle Livinghouse. According to CIC Emeric, "the level of community involvement was great -- phone calls were returned quickly and folks saw enough progress that they didn't feel it was necessary to come to meetings. The community was more willing to accept EPA's decisions."

Lessons Learned:

Enlist the Help of Community Leaders. Tremendous gains can be achieved by partnering with a community leader to engage the public. Utilize a few key people with influence to assist in building larger community relations and trust.

Be Proactive. Get out into the community. Don't wait for the community to come to you. Find the time to carefully listen to the concerns of the public. Be willing to talk about any issue the residents want to discuss, even if it is not directly related to the site. Follow through on your commitments.

Explain What Is Going On. At the outset, describe clearly what you plan to do and how the community can be involved. Provide your objectives and a realistic schedule. Also educate the community about the limitations of your authority and other relevant constraints.

Maintain the Same Site Team. Consistency with EPA site personnel goes a long way in building trust and showing a dedication to the community's long-term interests.

Community Cooperation in Cushing Leads To Effective Emergency Response

Students at the middle school of this small Oklahoma town were concerned about the old Hudson Refinery site. They started a letter writing campaign to get public officials to investigate the refinery that had been left inactive since 1982. This was not the first time the site came to the attention of EPA. In 1987, EPA and Hudson Oil and Refining Company had signed a Final Consent Decree (“FCD”) which set aside \$1 million for some cleanup and closure of the facility. In 1994 a U.S. District Court issued an Order for Closure of the consent decree when available resources had been exhausted even though the requirements of the FCD had not been completed. At least partially as a result of the students’ initiative and persistence, EPA came back to the site in the summer of 1998 and discovered friable asbestos containing material torn and hanging from refinery equipment. The Agency determined there was an imminent and substantial threat to public health and the environment and quickly mobilized for an emergency response.

More than a month after the response was underway, Rita Engblom, the on-scene coordinator, was alarmed at the discovery of a corroded tank of anhydrous hydrofluoric acid (HF) releasing HF vapors. It was quickly determined that this tank, with the potential to release enough HF to cause a 6 mile plume, posed a significant danger to the community. This discovery lent a new urgency to the cleanup action. Over 400 people lived within a quarter-mile of the site. They would have to be evacuated during the transfer of HF from the storage tank. Engblom and community involvement coordinator Donn Walters agreed that early and frequent coordination with local officials and citizens would be helpful. The results of their proactive coordination efforts exceeded expectations. By reaching out to the community they found invaluable support for this emergency action. In addition to gaining information about the plant from people who had worked there when it was active, the local government staged much of the support for the HF transfer.

The city manager brought in representatives from the fire and police departments, the emergency planning office, and local hospital. This coordination and planning group, which came to include staff from the State and other Federal agencies, continued to meet regularly. According to Engblom, it “took out of my hands” a lot of the time-consuming logistical work in getting ready for the one-day evacuation. The group did not rely on the typical use of newspaper notices and fact sheets to keep the community informed. On several occasions, local fire and police personnel went door-to-door in the area to be evacuated. They handed out flyers, explained and updated the situation, reassured the residents, and delivered details about safety plans. Local ministers volunteered to keep their congregations aware of the latest developments.

EPA, the Oklahoma Department of Environmental Quality (“ODEQ”), the City of Cushing, the Local Emergency Planning Commission, and the local Police and Fire Departments conducted a public meeting a couple of weeks before the agreed upon evacuation date. This meeting was held to provide information about the recommended evacuation of residents. The door-to-door efforts led to a large turnout. While the meeting hall was packed, it was not with anxious or upset people. Everyone was calm and the meeting

proceeded in an orderly, cooperative atmosphere, unusual given the nature of the potential danger. The meeting was broadcast and rebroadcast by a local network station to ensure everyone in the community would be fully informed.

During the evacuation, the City opened the Youth and Community Center for anyone who needed a place to stay. The ODEQ assisted EPA with the press. The local fire department loaned equipment, the highway department re-routed traffic, and the police department guarded vacated homes. The United States Coast Guard set up decontamination facilities. The American Red Cross set up a kitchen and a first aid station. The State Emergency Management Commission provided assistance with pets. And several local businesses donated their services, such as supplying food to people involved in the evacuation. As a result of all this, though the evacuation itself was stressful, it proceeded smoothly with the community bonding together in support of EPA.

Reflecting on the effort, Engblom says that everyone involved was unbelievably helpful. She adds, “the key was early, humble coordination.” She didn’t wait to disclose any information until she already had a plan or knew the all the implications. She had developed such a good working relationship with the community representatives that she felt comfortable sharing information as it was developed and as a result “got a lot more help than I ever imagined.” Walters too was impressed by the contribution of local organizations. He emphasizes that it was “a total community effort with outstanding cooperation and partnership by all the parties involved.” The State, which played an active role in the response partnership, also was significantly impressed with EPA’s efforts to be inclusive. Mark S. Coleman, Executive Director for ODEQ writes, “...inclusion of the local community early in the process ensured that the recommended evacuation proceeded smoothly”.

Lessons Learned:

- **Ask For Assistance.** If you sincerely seek information or support from a community you will almost always get something worthwhile. And you will probably be pleasantly surprised at how much useful help and support does come your way.
- **Partnership Pays Off.** In an emergency situation, collaboration may seem like a luxury. It almost never is. The time spent building strong working relationships will be returned multifold in valuable good will and support that can make a crucial difference.
- **Early Involvement Is Key.** The sooner you reach out the better. This helps to demonstrate your interest and commitment and sets the stage for the cooperation from the community. The longer you wait to involve others the harder it is to get started and the fewer good ideas you will have as timely input.

Jumping on the Community Participation Bandwagon in Jasper County, Missouri

Between 1850 and 1970, Jasper County was at the heart of one of the highest lead and zinc production areas in the world. The wastes from the operations polluted surface water, ground water, and soil. Over 2,400 residential yards were contaminated with lead above acceptable levels. In 1995, at the completion of an exposure study which showed elevated blood lead levels in residents, Mark Doolan, the Remedial Project Manager (RPM), planned an availability session with local government officials to talk about the results. He orchestrated extensive local media coverage and sent out 30 personal letters of invitation; but only three officials attended. Not willing to give up, Doolan personally contacted the Mayor of the City of Joplin to explain the seriousness of the situation and to seek his support. That very evening the City Council was told about the problem and agreed to establish a community advisory group (CAG) to work with EPA in planning and conducting the response.

The CAG has been a big success, according to Earl Carr, the CAG Chair. It has been much more than just an effective way of getting everyone with an interest in the site talking and working together. The CAG has become a catalyst for planning and implementing a number of health and environmental activities beyond the scope of what EPA is able to do. For example, the CAG has sponsored the delivery of local health education programs for school children, the development of a Lead Poisoning Prevention merit badge for the local Girl Scout chapter, and applied for and been awarded a \$1 million grant from the Department of Housing and Urban Development for interior lead paint abatement.

All of these efforts have contributed to the feeling on the part of the citizens that they are involved and making a difference. Mark Doolan believes this positive outlook has carried over to help EPA accomplish its responsibilities more smoothly. The community bought into EPA's proposal for treatability study of an innovative technology, phosphate stabilization of metals. Without a good rapport with the community Doolan knows he would have had a difficult time justifying the approach and getting support for it.

The success that Doolan has had results from his willingness to go well beyond a good communications strategy. Previous to joining EPA as an RPM, he was a consultant who had extensive experience at Superfund sites. He says, "the sites that had the most problems with remedy selection were generally the ones where the least community involvement work had been done." Consequently he always invests a considerable amount of his own time, about 30% over the first year, to direct contact with community members. And he looks for ways to provide support and service that will demonstrate his interest in the welfare of the community. For example, he organized a public "risk assessment 101" course that helped lay the foundations for acceptance of the risk management decisions being made. He also arranged for the community to receive \$200,000 (part coming from response funds and part from discretionary Regional funds) to develop its own environmental masterplan. This plan included institutional controls that EPA otherwise would have had to develop.

Although he is a believer in openness and sharing of information, Doolan was at first reluctant to convey early drafts of technical documents to the community. In part this was because of one environmental activist who tended to overreact to every new piece of data, making life much more difficult for EPA. But Doolan found that the early consultation helped build more trust over time. And while he still is frustrated sometimes with the reaction he gets from the environmentalist, the two of them now have a basic respect for one another and are able to have a constructive relationship.

Lessons Learned:

Involvement Is A Good Investment. Efforts to include the community up front pay big dividends in terms of acceptance of EPA actions and result in a more effective remedial action.

Think Communication. Frequent open and honest communication with the community has fostered a high level of trust in EPA and its actions, and has created a true spirit of cooperation with the community.

Be Open. Providing the community with early drafts of technical documents for review and comment is worthwhile in the long run even though it may cause short term disagreements and difficulties.

Loosening the Loggerheads at Leadville: Community Involvement by “Hanging Around”

Starting in 1983 EPA began planning for a Superfund cleanup of the California Gulch mining site in Leadville, Colorado. By 1995 the Colorado legislative representative from the community was suggesting that EPA staff be hanged at the city limits. Today EPA is working in partnership with local leaders to complete a successful cleanup. What turned this situation so dramatically around?

One big factor was the appointment of Mike Holmes, a former On-Scene Coordinator, as the new Community Involvement Coordinator. He took the hanging comment as good, free advice-- and began spending a significant amount of time “hanging around” in the community making conversation and learning about its culture and concerns. Mike says that in this kind of situation you can’t be “an occasional visitor. You must be there regularly, listening and responding in a neighborly way.” You are going to increase your chances of success if “you pay close attention to what the community is worried about and make its agenda part of your own.” Mike adds that you must avoid the temptation to lecture the community and to have an attitude that you are there to save it. Instead, find out what it perceives as the primary threats and deal with them along with the problems that are on your agenda. For example, while EPA’s priority remained the reduction of the possibility of child ingestion of lead, the EPA team began to focus more attention on the stream quality and fishing, on reducing the impacts to the Arkansas River, and on improving recreational opportunities. These were the issues at the top of the community’s list of concerns. In addition, Mike and the EPA team undertook several innovative initiatives. They

- supplemented monthly public meetings by sitting down in residents’ living rooms and talking with, not to, them.
- held weekly dialogues with county commissioners to listen to their concerns and to exchange ideas.
- showed respect for Leadville’s mining heritage by working with the town to develop an historic preservation plan that would help guide cleanup decisions.
- demonstrated EPA’s responsiveness by initiating a series of small removal actions targeted to the community’s most important concerns.

Although time-consuming, establishing a presence in the community -- hanging around -- was the keystone of the team’s efforts. Informal face-to-face conversations with EPA staff, not with contractors, made the difference. For the first time there was real communication. This led to understanding and eventually the trust needed to move forward. The turnabout was so complete that the team was invited to the wedding of a county commissioner’s daughter!!

Lessons Learned:

Build Relationships. Invest the substantial amount of time necessary to show the community you are “real people” sincerely concerned about its well being.

Be Creative. Don’t be afraid to go beyond the traditional community relations approach. Adapt your style and activities to the community.

Show Progress. The best community relations tools are often “bulldozers and backhoes” that demonstrate EPA is serious about completing the cleanup and getting out of town.

Building Ties to the Community Finally Pays Off in Los Angeles

Located in a mixed industrial and residential area of Los Angeles County, the Montrose Corporation site was the west coast's largest manufacturer of DDT. Plant operations significantly contaminated storm sewers, groundwater and soils close to the plant, as well as Pacific ocean sediments. Across the street, the Del Amo Waste Site, a former synthetic rubber manufacturing plant, is about 50 yards from a number of residential backyards. In 1991 the Region 9 team inherited the Del Amo site from the State of California, along with a lot of community distrust and ill will.

EPA's biggest challenge was to address community fears about possible adverse human health impacts. The neighbors' concerns were heightened when, in 1994, EPA discovered bowling ball-sized chunks of DDT contaminated fill buried in two residential yards. Region 9 began a time critical removal action, but did not adequately develop its risk communication messages. This had the unfortunate effect of adding to existing fear and suggesting to the community that it was at high risk of exposure. To address community health concerns, EPA and Agency for Toxic Substances and Disease Registry (ATSDR), cooperated to open a clinic to evaluate the health impacts from both sites.

The Del Amo Action Committee (DAAC) is a citizen's group headed by Cynthia Babich. She is a local community organizer who was personally affected by the DDT fill. She says some in the community became frustrated when there was no quick information available, when information was only provided when the community asked the right questions, or when the information was too technical or inconsistent (i.e., data sometimes given as parts per million and at other times as parts per billion). For already fearful residents, confusing or incorrect information easily sparked mistrust. Rightly or wrongly, due to the prior history of problems with state regulators, the residents tended to interpret miscommunications as deliberate attempts to withhold information or mislead.

The DAAC requested an extensive permanent relocation of residents. This put the site team, which wanted to be responsive to the community and build credibility, in a bind. EPA management believed that relocation was unnecessary. Finally agreement was reached to temporarily relocate 30 families during the excavation work. Then it was difficult to get the residents to move back. This resulted in greatly expanded costs and excessive time needed for the cleanup while addressing only a fraction of the problems at both sites.

Site team members often were overwhelmed by these and other social issues, according to Remedial Project Manager Bruni Dávila. Since other agencies on the project, like the Army Corps of Engineers, had no public participation experience or community involvement training at all, the site team bore the brunt of citizen interaction. This resulted in considerable stress that led to much burnout and subsequent team turnover. The community was frustrated by this turnover and by continually having to get new staff up-to-speed.

Ultimately, the Region undertook to overcome the community resistance with a proactive, energetic, and focused effort to reach out to community members. The site team developed a strategy to engage the community. The team offered workshops and poster board sessions about site problems and clean-up solutions, did door-to-door neighborhood visits and dialogues with focus groups, distributed many readable fact sheets, and established a community accessible database of resources on the Internet. At the request of Congresswoman Harman, negotiations between the Del Amo PRPs and the community took priority over the response work. In March 1997, EPA facilitated a successful private buy out deal between the Del Amo PRPs and 65 neighbors living closest to the site.

Because of the attention and persistence, the site team's relationship with the community finally began to improve. According to Cynthia Babich, "if it wasn't for Community Involvement Coordinator Andy Bain, a genuine partner, I would have given up. The present EPA team works hard and has been highly committed and motivated." Eventually, the community accepted compromise solutions based on an increasing trust in EPA. For example, during the public comment period for the Del Amo Waste Pits, the community reviewed the five remedies in the proposed plan and overwhelmingly supported EPA's preferred cleanup alternative. Later on there was a very positive and collaborative DDT fill removal that was accomplished with care to ensure no dust was generated. A Community Advisory Panel, organized by both EPA and the Del Amo PRPs, is now focusing on land reuse options, such as a neighborhood park and multi-use center, to be funded by the PRPs.

Lessons Learned:

Plan Carefully. Take the time to anticipate the public's concerns and likely reactions and develop effective involvement strategies. Be consistent about EPA plans and clear on the difference between community assisted decisions and ones which the agency has little discretion to share.

Be Calm And Patient. Listen to criticism and "venting" without getting defensive.

Coordinate With Other Agencies. Work in partnership with the State, ATSDR and others. Community trust and acceptance is greatly strengthened when all responders cooperate and have mutually shared objectives.

Plan And Manage Meetings Well. Have ground rules that ensure everyone has a voice, including non-English speakers. Keep the microphone open and moving around the audience. Give community groups an opportunity to speak at the start of a meeting to reduce tension and opposition.

EPA Dunking Helps Wash Out Community Resistance

The Asarco Tacoma Smelter is located along Commencement Bay in Ruston, Washington, a small town surrounded by the metropolitan city of Tacoma. Owned by ASARCO, Inc., the smelter processed lead and copper for close to a century. The plant released sulfur dioxide gases and dust particles (containing arsenic and other metals) into the air. Much of the dust settled nearby contaminating the soil and the waters of Commencement Bay. ASARCO poured hot slag, a waste product of the smelting process (containing lead, arsenic, copper, and other metals), into Commencement Bay to cool and harden, creating an artificial shoreline. Some slag was cooled on land, resulting in a black, rock-like material that was sold to residents and businesses in the community for landscaping purposes, driveways, sandblast grit, fill, and other purposes. The clean-up involved smelter demolition, site and marine cleanup, and residential soil cleanup

An expedited action to clean up eleven of the most seriously contaminated properties showed Region 10 a hint of the problem it faced. The property owners refused access because they did not think any response was necessary. Residents were distrustful of government and its warnings of health risks with no irrefutable causal link. And they were loyal to ASARCO, the town's sole tax source which had employed the residents for generations. When the company made the business decision to close and move overseas, the Ruston community blamed EPA for the job losses.

Cleanup of hundreds of residential yards still needed to be done. Region 10 management realized that if it did not change and find a way to break through the resistance, the community would block the work. According to Community Involvement Coordinator Michelle Pirzadeh, "regardless of how good a recommended solution is, it cannot be implemented without getting people on board. To prove ourselves we needed to visibly address concerns, follow through on promises and build trust – with no surprises."

The Ruston/North Tacoma Community Workgroup formed in 1990 when the planning for the residential cleanup began. The workgroup included community members and met on a monthly basis until the start of cleanup activities in 1993. Initially, the workgroup was somewhat negative and reactive, according to Mary Kay Voytilla, Remedial Project Manager for the residential area. Workgroup members would not actively engage in discussions about how the cleanup could best meet the needs of the community. Instead they questioned the need for the cleanup. Charlene Hagan, Town Council member, described the relationship between EPA and the community as adversarial. "EPA was heavy handed and the community operated like a lynch mob."

The members of the site team recognized it would have to redouble its efforts to reach out and include the community in cleanup. They became more personally involved and began knocking on doors, interviewing residents on the process and the type of involvement desired. They held workshops and created opportunities for dialogue, such as one-on-one availability sessions. For the first time, residents began to feel that EPA really was listening to and interested in what they had to say. The site team took other steps to reach out and get involved in the community.

- Clayton Johnson, a Ruston resident, was asked to be the community liaison and serve as EPA's eyes and ears at key meetings. He answered resident's questions and help to facilitate issues even though some community members still saw him as an EPA spy.
- EPA formed the Ruston/North Tacoma Coordinating Forum to facilitate discussion and coordination among the various agencies and organizations involved in or affected by the residential cleanup. The Forum assisted in the development and selection of a remedy that would be implementable in the community.
- The site team stopped holding large meetings. Instead they used smaller public meetings in residents' homes.
- Fact sheets, mailers and a Residential Soils Bulletin on the progress of the cleanup were routinely distributed to residents, property owners, business and schools. Under a cooperative agreement, the Tacoma-Pierce County Health Department developed two brochures related to the handling and disposal of contaminated soil.
- The Region provided informational brochures and bankers' seminars for professionals involved in property transactions. They wrote up typical real estate questions and answers related to property values and set up a database for property transactions.
- The site team showed its commitment to the community by volunteering at a local fund raising event to be dumped in a water tank.

Lessons Learned:

Community Buy-in Is Critical. Regardless of how good a technical solution may be, it will not be successful without community support.

Resistance Is Not The End Of The Road. Persist in building relationships and proactively reaching out to break through suspicion and opposition.

Create A Community Liaison. A resident who is willing to serve as a go-between and facilitator is an invaluable resource.

Reaching out Made a Difference at the Palos Verdes Shelf

Between 1947 and 1983, Montrose Chemical Corporation of California, Inc. operated one of the nation's largest Dichlorodiphenyltrichloroethane (DDT) plants near Torrance, California. DDT is a synthetic pesticide that was used to control military and civilian populations from the spread of malaria and lice. The Montrose Chemical Corporation discharged waste containing DDT residue into the Los Angeles County sewer system which eventually emptied off the Palos Verdes Peninsula and into the ocean. It is estimated that over 1,700 tons of DDT were discharged between the late 1950s and the early 1970s. The Palos Verdes Shelf (PVS) site is one of the largest contaminated sediment sites in the U.S.

In 1994, the Natural Resource Trustee agencies released the Southern California Bight Natural Resource Damage Assessment reports which describe the impacts the contaminated sediments have had on the marine ecosystem. The Environmental Protection Agency (EPA) initiated an investigation in 1996 through the Superfund program to evaluate the need for and feasibility of cleaning up the contaminated sediments on the ocean floor in order to address human health and ecological risks. Soon after, EPA issued a proposed plan that recommended initial response actions to address human health risks associated with the consumption of contaminated fish. Prolonged exposure to DDT and PCBs can cause health problems such as cancer, liver disease, growth and developmental delays, and effects on the immune system.

The cleanup plan for the PVS site included an Institutional Controls program to protect the most vulnerable populations from the health effects of eating contaminated fish. The Community Involvement Coordinator (CIC), Jackie Lane, and the Remedial Project Manager (RPM), Sharon Lin, worked with the state and local government officials and community groups to implement the Institutional Controls program. The objective of the Institutional Controls program is to reduce human risk exposure from eating contaminated fish related to the PVS. The Institutional Controls program has three major elements that focus on public outreach and education, fish monitoring (market and ocean), and enforcement.

EPA collaborated with several federal, state and local agencies, environmental groups, and community based organizations to form the Fish Contamination Education Collaborative (FCEC). Heal the Bay, Cabrillo Marine Aquarium (CMA); Boat People SOS (Vietnamese community in Orange County), St. Anselm's Cross Cultural Center (Vietnamese community in Orange County) and Korean Resource Center (KRC) are major community and local non-profit groups that comprise the FCEC.

The FCEC has worked effectively to help communicate with the public and in the public's interest. The FCEC has implemented several programs to enforce and address the risk associated with the consumption of contaminated fish. One of the key program elements consists of educating the community about contaminated fish and the health risk involved with eating fish.

The Community Outreach program interacts with the community by giving trainings at schools, community health clinics, English as a second language classes, and health fairs. St. Anselm's Cross Cultural Center and Boat People SOS, organizations with the Vietnamese community, educate members on the risk of consuming contaminated fish. The FCEC has also created a website (www.pvsfish.org) to inform the community about where to fish, and proper ways to prepare fish that include removing fatty portions to lower the amount of chemicals consumed. Currently, the website receives an average of 6,000+ unique visitors every month. The Angler Outreach program educates pier and shoreline anglers in Los Angeles and Orange County on the risks of consuming DDT and PCB contaminated white croaker. FCEC focused outreach efforts at piers adjacent to the most polluted area. FCEC educates more than 10,000 anglers each year and disseminates information to 30 different bait shops and fishing supply stores near the piers.

The second element of the Institutional Controls program is fish monitoring. The fish monitoring program involves sampling contaminant levels in fish in the ocean and retail markets. EPA and the natural resource trustees for the Montrose case undertook a large scale fish sampling and analysis effort from 2002-2004. The collected data served as the basis of the updated site risk assessments, which is also the basis of the EPA's clean up decision.

EPA, working with the state and local enforcement agencies, is actively enforcing white croaker fishing ban off the Palos Verdes peninsula and white croaker bag limit for sport fishing. The enforcement portion of the program is mainly implemented by the California Department of Fish and Game (CDFG). The program prohibits commercial catching of white croaker in the PVS area and establishes a daily white croaker catch limit for sport anglers. Local county health officials conduct market monitoring for contaminated white croaker as a local enforcement measure.

The Institutional Controls Program has had positive results. The program has demonstrated quantitative risk reduction through a fully integrated program. The outreach activities have been conducted in approximately 14 languages to better communicate with citizens. Many people have changed the way they prepare their fish. In May of 2009, the PVS FCEC Community Outreach team received the prestigious Citizen Excellence in Community Involvement Award from the EPA for its work to protect the most vulnerable populations in Southern California from consuming contaminated fish. The case of the Palos Verdes Shelf shows that through collaborative outreach and education programs, fish advisories can make a difference by educating, recognizing, helping, and communicating to the public.

Lessons Learned:

Education and Enforcement Go Hand in Hand. A fully integrated program can provide a quantitative outcome in risk exposure.

Strategic Planning Brings Together All Stakeholders. Strategic planning is an effective tool to bring together all stakeholders to work towards the same goal.

Cooperate and Collaborate. Working with local groups to provide outreach programs in a one-on-one setting reached a larger audience than local community meetings alone.