

Compendium of Key Community Engagement Practices at RCRA Sites



“Opening Doors to Community Involvement”



Prepared by
EPA’s Office of Resource Conservation and Recovery and
U.S. EPA’s Community Engagement Initiative Action 3 Working Group



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Region 7	South Dakota
Region 8	
Region 9	
Region 10	

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Introduction

In December 2009, EPA's Office of Solid Waste and Emergency Response (OSWER) introduced the Community Engagement Initiative (CEI), which is designed to enhance OSWER and regional offices' engagement with local communities and stakeholders to help them meaningfully participate in government decisions and land cleanup, emergency preparedness and response, and the management of hazardous substances and waste. OSWER developed an implementation plan for achieving the goals and objectives of the CEI. The Plan includes 16 actions that directly respond to the Agency's priority mission of expanding the conversation on environmentalism with disadvantaged communities, and the principles of the Administration's Open Government Directive – transparency, collaboration, and participation. The implementation of these actions is intended to assist EPA make timely and informed decisions that are influenced by the broad diversity of voices and interests in the communities it serves.

Purpose

This report was developed under CEI Action 3: Sustain a Dialogue with EPA Regions and State RCRA Delegated Programs to Identify and Promote Best Community Engagement Practices. Regulations for hazardous waste treatment, storage, and disposal facilities (TSDFs) under the Resource Conservation and Recovery Act (RCRA) are implemented by states authorized by EPA to do so, or by EPA regional offices where states are not authorized. Thus, authorized states, and in some cases EPA regions, are responsible for conducting community engagement associated with hazardous waste permits and cleanups at RCRA TSDFs. The purpose of this report is to present those community engagement practices that have been found to be effective, and document and share those practices so that program implementers across the country can draw on the successful experiences of their counterparts.

RCRA sites vary widely in terms of size, complexity, wastes and contaminants. Community impacts, concerns and interests vary as well. For that reason, the type of community engagement activity used at a particular facility is tailored based on the site-specific situation. This report documents community engagement practices being conducted at RCRA facilities across the country by the U.S. EPA regions, state environmental agencies, and the RCRA facilities themselves. In some cases, the facilities highlighted are those where there has been a need for a high level of community engagement – for example, where there is a potential human exposure, where there are vulnerable communities, or where there is a high level of community interest. Therefore, in some cases, the approaches discussed in specific examples may be most applicable to facilities with similar situations. However, the document lists a wide variety of tools which would, alone or in combination, have applicability to a broad range of sites. The document serves as a resource tool for states and EPA regions, as well as regulated facilities, conducting community engagement for RCRA and polychlorinated biphenyl (PCB) activities.

Methodology

Members of the CEI Action 3 workgroup chaired by the Office of Resource Conservation and Recovery (ORCR), include representatives from EPA Headquarters, EPA regions, and the states. The Workgroup provided examples of tools they have used to engage communities and the names of RCRA facilities where community engagement activities took place. Since many of the regulations for the RCRA program

have been delegated by EPA to the states for implementation, the workgroup members also provided names of contacts working in the states who could provide information about what the states are doing to engage communities, as well as to provide information on other sites where community engagement would be worth highlighting. The Workgroup, through its contractor, EMS, Inc., contacted EPA regional and state contacts to discuss sites that might be good candidates to highlight in this report, as well as any policies or procedures the states use to promote community engagement at RCRA facilities within their state. Because of the common, and sometimes intertwined, issues between PCB sites and RCRA sites, a limited number of PCB sites were raised in this dialogue. The results of these discussions are highlighted in this report.

Public Participation in the RCRA Program

The public plays an important role in the permitting process for hazardous waste facilities. EPA's RCRA regulations provide for public participation at all permitted hazardous waste management facilities—from before permit application, through the permitting process, and during the permit's life. Facilities applying for a permit are required to involve the public in some aspects of the process. Businesses and the state or federal permitting agency also are required to make information available to the public. The public has opportunities to submit comments and request public hearings. Not all RCRA sites are cleaned up under a permit. Some sites are cleaned up under an order or mechanism other than a permit. EPA encourages these sites to follow similar public participation practices.

It is EPA's position that all stakeholders in RCRA permitting actions have a role in providing for meaningful public participation. Each stakeholder group -- regulators, public interest organizations, community residents, and regulated facilities -- can take steps to increase participation and improve communication. Of course, the federal and state agencies still administer RCRA and its public participation activities, but EPA acknowledges that members of communities and owners/operators of hazardous waste management facilities also play an integral role in the permitting process.

Citizens and local communities have a role in providing input to cleanup activities at hazardous waste facilities, also known as corrective action activities. Since spills from a treatment, storage, and/or storage facility (TSDF) can affect large areas, public involvement can be particularly helpful, especially when there are concerns regarding potential off-site contamination, and when there are concerns over the selection of remedies. While the corrective action process is flexible on a site-by-site basis, EPA encourages facilities and regulators to interact with the public during various stages of the corrective action process.

A program process diagram of the RCRA Permitting Process, which illustrates points in the process where the public can get involved in the RCRA process, was developed by EPA's CEI. It can be found on EPA's CEI webpage at: <http://www.epa.gov/oswer/engagementinitiative/rcra.html>. A program diagram of the RCRA Corrective Action process with a discussion of potential areas the public may want to be involved in is posted on EPA's CEI Webpage at http://www.epa.gov/oswer/engagementinitiative/cei_flowchart.pdf.

RCRA Public Participation Manual

EPA's RCRA Public Participation Manual is a "user's manual" that explains how public participation works in the RCRA permitting process (including corrective action), and how citizens, regulators, and industry can cooperate to make it work more effectively. It also describes a wide assortment of activities to enhance public participation, and includes several appendices with lists of contacts, sources of information, and examples of public participation tools and activities. The manual recognizes that many RCRA corrective action sites are cleaned up under an order or other non-permit mechanism, and encourages public participation at these sites that is equivalent to that which would be carried out at a permitted site.

The RCRA Public Participation Manual includes requirements pursuant to the 1995 RCRA Expanded Public Participation rule. This expanded rule requires: (1) a public meeting to be held by the facility prior to submitting the part B RCRA permit application; (2) expanded notice requirements, including use of a posted sign, a radio broadcast notice, and a newspaper display advertisement to publicize the meeting; (3) notification of the public when the agency receives a permit application and makes it available for public review; (4) discretion by the permitting agency to establish an information repository, which will be supplied and maintained by the applicant or permit holder; and, (5) additional notices during the trial burn period for combustion facilities.

The Public Participation Manual acknowledges that situations often occur where the facility or the Agency will need to go beyond what is required by regulation. Regulators, facility staff, or community groups may want to consider going beyond what is required—if resources allow—at priority facilities, controversial facilities, or at facilities where the affected community has a particular need for greater involvement or access to information. In these cases, the Manual advises seeking input from other stakeholders to determine if the required public participation activities are adequate or whether other public participation activities are needed. Examples of other activities include the development of public participation plans (now more commonly called "Community Involvement Plans"); development of and need for translation of fact sheets, public notices, and other information into languages spoken by members of the community; project newsletters and reports to keep people informed about corrective action and permitting activities; briefings to share information with key stakeholders, whether they are involved regulators, elected officials, or members of involved public interest or environmental groups; and facility tours to help the public increase their understanding of the issues and operations at a facility and the RCRA-regulated process underway.

The RCRA Public Participation Manual can be accessed on EPA's website at:
<http://www.epa.gov/osw/hazard/tsd/permit/pubpart/manual.htm>.

Public Participation at RCRA Sites

In the years since the Public Participation Manual¹ was issued, OSWER programs have embraced a more expansive view of the role of the community in site activities. Many of the "optional" activities described in the Public Participation Manual now often are the norm. Just as terminology has evolved over the

¹ The RCRA Public Participation Manual was developed in 1996.

years, so too, has OSWER's approach to involving communities affected by hazardous waste sites—that is, working with the public throughout the process to ensure that community needs and concerns are consistently understood and considered.

In addition, new information tools have become available. For example, EPA has released the “[Cleanups in my Community](#)” web-based information system that allows a citizen to type in a location, (such as a city, county, Zip Code or State) and find out what hazardous waste sites and other cleanup sites are located in that area. The system provides key information on the status of cleanup and lists contacts and resources where additional information can be found. This tool allows citizens to identify sites near them, follow cleanup activities at a high level, and gives them the information regarding where they can learn more about the site.

Community Engagement Practices Being Implemented at RCRA Sites

This section highlights a number of community involvement efforts undertaken or overseen by EPA or states at RCRA corrective action, permitting, or PCB-contaminated sites. The selection of sites profiled here is based on suggestions and interviews with members of the CEI Action 3 Workgroup, other EPA Headquarters and EPA regional staff, and other state officials.

The information included in this section is presented by specific EPA regions and should be considered a starting point for further exploration rather than an exhaustive compendium of community engagement activities throughout the nation. Not every community engagement practice or strategy presented here will necessarily be applicable at every site since practices need to be tailored to fit sites and communities.

It should be noted that the document presents examples that go beyond the baseline RCRA requirements. In some of these cases, additional tools and community engagement processes used in the Superfund program have been used to supplement community engagement activities. Superfund's extensive history with community involvement can be very beneficial both for EPA and the States. This is often dependent on site specific situations, available state resources, and other factors. This highlights that community engagement practices in one program can work equally well for similar situations in other programs, and that site-specific issues are not confined just to one program, but are often intertwined. For example, facility operations may often involve Superfund, RCRA, and Air programs. Given that the general public does not differentiate among EPA programs, it often helps to look at a site holistically and communicate to the public on behalf of all programs involved at the facility, using a “One EPA” approach.

Region 1

***Connecticut Yankee (a.k.a Haddam Neck Plant), Haddam Neck, CT
RCRA Permitting Facility***

The Connecticut Yankee Atomic Power Station (CY) is a former nuclear power plant, in Haddam Neck, CT. Decommissioning of the plant was completed in 2007. RCRA corrective action activities at the site are also complete. CY is now looking at options for the future use of the property. Public participation has been moderate, but was expected to increase due to the existence of a Citizens Awareness Network, the high profile of the site, and the completion of the decommissioning process.

In November 2006, the Community Decommissioning Advisory Committee (CDAC) was transformed into the Connecticut Yankee Fuel Storage Advisory Committee (FSAC). The FSAC was established to facilitate open communication, public involvement and education regarding the interim storage of spent fuel and transportation of spent fuel and high-level radioactive waste. The FSAC meets twice a year, and meetings are open to the public. The facility maintains a website to keep the public informed about site activities, press releases, meetings, etc. The site can be found at <http://www.connyankee.com/index.html>.

***Pharmacia and Upjohn Company, LLC, New Haven, CT
RCRA Corrective Action/RCRA Brownfields Pilot***

The Pharmacia and Upjohn facility in New Haven, Connecticut, was a former pharmaceutical chemical manufacturer. It is presently the subject of a National RCRA/Brownfields Pilot to determine whether early public input use would enhance the final remediation of the site. The facility is currently in the RCRA Facility Investigation (RFI) stage (field investigation to determine nature and extent of contamination on-site) of a RCRA Corrective Action, which was required pursuant to an EPA RCRA enforcement order, and has also implemented several Interim Corrective Measures (ICMs), including a groundwater pump and treat system, aimed at alleviating threats to health or the environment caused by on-site contamination.

Pfizer acquired the Pharmacia and Upjohn property in 2003. Since then, Pfizer has consistently engaged federal, state, and local stakeholders. A broad stakeholder engagement process was implemented throughout the site investigation, reuse planning and corrective measures processes. Pfizer and its consultants worked with community representatives and environmental groups to establish key objectives for the remediation and future use of the property. These groups included the Quinnipiac River Watershed Association (QRWA), North Haven Land Trust, Regional Growth Partnership, North Haven Trail Association, and numerous town boards and commissions.

Pfizer also worked with the community to understand their preferences for redevelopment. The team implemented a stakeholder-driven reuse planning process, which included market analysis, feasibility planning, and stakeholder interviews with the real estate community, economic development leaders, Town boards and commissions, the Community Advisory Panel, and many other stakeholders. This process included presentations and discussions with hundreds of stakeholders. As the concept of an “ecological preserve” began to take shape, Pfizer worked closely with environmental stakeholders,

including the QRWA, North Haven Land Trust, Yale University and the University of New Haven experts on the Quinnipiac, as well as expert consultants in ecological restoration and interpretive planning. In addition, Pfizer and its consultants held a series of presentations with community groups throughout North Haven in preparation for the public notice of the proposed remedy. These presentations included a presentation of a video, which explained in detail the remedy and redevelopment. Pfizer technical representatives and consultants were present at each presentation to fully answer the community's questions. Hundreds of stakeholders attended these presentations, which were hosted by many of the stakeholder groups involved.

Pfizer has held open houses at the Upjohn site to provide the public an opportunity to see the progress being made and to better understand the property's characteristics and layout. The first open house, which was held June 20, 2009, included a canoe trip along the Quinnipiac River led by QRWA, as well as a guided bus tour of the Upjohn site led by Pfizer. The second event, held May 22, 2010, included bus tours, presentation of the video, and an open dialogue with interested stakeholders.

Pfizer maintains a website, which serves as a source of news and information for the residents of North Haven and the surrounding communities regarding corrective measures at the Pharmacia & Upjohn Company LLC Site. It is located at: <http://www.upjohnnorthhaven.com/index.php>.

Sporting Goods Property, Bridgeport, CT
RCRA Permitting Facility

Sporting Goods Properties, Inc. (SGP) owns the 419-acre "Lake Success Business Park" in Bridgeport, CT, formerly owned and operated by the Remington Arms Company. Remington used the property for production, testing, storage, and disposal of small and large caliber ammunition and powders. The company also operated a hazardous waste lagoon as part of its wastewater treatment system. SGP has made considerable progress investigating and cleaning up contamination at the property under a RCRA §3008(h) consent order with EPA. SGP holds periodic open-to-the-public Community Advisory Panel meetings in Bridgeport and publishes an annual newsletter to keep the public informed of their progress. Region 1 maintains a website regarding the property at:
http://yosemite.epa.gov/r1/npl_pad.nsf/8b160ae5c647980585256bba0066f907/c8f5dac494802bac85256c2f0060ab55!OpenDocument 1

Region 2

Vieques Island, PR
RCRA Corrective Action Site

EPA and the U.S. Department of the Navy entered into a RCRA 3008(h) Administrative Order on Consent in 1999, which required an environmental investigation of potential contamination on its former Atlantic Fleet Weapons Training Facility, located on the eastern side of Vieques Island in Puerto Rico. The former facility was used for ground warfare and amphibious training, naval gunfire support training, air-to-ground training, and to store munitions and other support structures for training. The site was placed on the National Priorities List and was transferred to the Superfund Program in 2005. However,

EPA continued to oversee this work under the RCRA Order until 2008, when EPA entered into a Federal Facilities Agreement with the Navy and other Agencies.

Under RCRA, EPA Region 2, the Navy, and other federal and Commonwealth agencies were involved in a number of community engagement activities. In 2003, EPA held public availability sessions to inform the community about cleanup activities. EPA also conducted community interviews to receive public input in the process of developing the Community Involvement Plan (CIP), which highlights public concerns and details methods EPA uses to inform and involve the public on upcoming actions. The CIP was finalized in 2007. In 2004, the Navy formed a Restoration Advisory Board (RAB) comprised of 17 community members and four ex-officio members from EPA, the Navy, and federal and state natural resources trustees. The RAB holds quarterly meetings and allows for the sharing of information on the environmental restoration and munitions response process. The meetings are open to the general public, offer simultaneous interpretation in Spanish and English, and are announced via bilingual public notices in the local press and broadcast by megaphone trucks. Other community involvement activities include conducting public forums, information sessions and interviews, constructing mailing lists, distributing fact sheets, reports, and newsletters, presenting workshops on risk assessment, making site visits to community members, and posting public notices. All materials are distributed in both English and Spanish. Region 2's Vieques Island website is at: <http://www.epa.gov/region2/vieques/index.html>

E.I. DuPont De Nemours & Company, Pompton Lakes, NJ
RCRA Corrective Action Site/Vapor Intrusion

The E.I. DuPont De Nemours & Company (DuPont) facility occupies approximately 600 acres of land in Pompton Lakes and Wanaque, NJ. DuPont conducted operations at the site from 1902 to April 1994, when the facility closed. DuPont manufactured lead azide, aluminum, or bronze shelled blasting caps and operated processes producing metal wires and aluminum and copper shells. The New Jersey Department of Environmental Protection (NJDEP) Administrative Consent Order (ACO), NJDEP Ground Water Permit (NJPDES-DGW) and a United States Environmental Protection Agency (EPA) Hazardous and Solid Waste (HSWA) Permit require cleanup of the facility.

DuPont is currently conducting remedial investigations and remedial actions. EPA and NJDEP are coordinating regulatory reviews of all required reports and work plans. The manufacturing operations and waste management practices throughout the site resulted in contamination in groundwater, sediments and soils. To date, significant investigation and remediation has been conducted in soils and groundwater and additional remedial actions and investigation are required in the future to fully remediate site discharges.

EPA and NJDEP required DuPont to conduct a vapor intrusion study of the off-site plume, to determine whether contaminants in the plume are migrating into the air inside buildings. In May 2008, EPA and NJDEP received data from DuPont documenting soil gas concentrations of chlorinated volatile organic compounds in the subsurface elevated above soil gas screening levels. As a result of the elevated soil gas screening levels, EPA and NJDEP required DuPont to submit a work plan to address vapor intrusion concerns and conduct additional groundwater and vapor investigation. Approximately 450 properties are affected.

To address the vapor intrusion issue, DuPont began installing vapor mitigation systems in accordance with a work plan approved by the Agencies in June 2008. DuPont has installed over 230 systems over a three-year period since the work plan was approved. EPA also worked with the NJDEP and DuPont to implement a program where residents that have not yet received a vapor mitigation system can now select an independent contractor to perform the installation or conduct additional sampling on their property at DuPont's expense. DuPont also operates a Public Information Center, which provides information on the vapor intrusion issue and other issues related to site cleanup.

Community engagement activities conducted at the Pompton Lakes/DuPont site have been above and beyond those required by RCRA public participation guidelines. In general, EPA Region 2 models its community engagement activities at the Pompton Lakes/DuPont site after the types of activities conducted through the Superfund program. A Community Involvement Coordinator (CIC) has been designated specifically for the site. EPA also assisted the community in forming a Community Advisory Group (CAG) using the Technical Assistance Services for Communities (TASC) Program. The CAG is composed of ten members, four of whom live in homes affected by vapor intrusion. The CAG, however, has created controversy in the community, as some residents felt that the CAG membership may not adequately represent all individuals who own homes located on the plume. In response, the CAG began allowing more time for questions during public meetings and now specifically allots a timeframe for all residents to ask questions, and additional membership is under consideration. The New Jersey Department of Health and Senior Services (NJDHSS) and the Agency for Toxic Substances and Disease Registry (ATSDR) have also formed a separate CAG to address health-related issues and concerns.

EPA Region 2 holds public meetings frequently. Information and question-and-answer sessions are regularly held. In addition, EPA disseminates fact sheets and shares technical reports and documents with the community through the EPA Pompton Lakes/DuPont website at http://www.epa.gov/region2/waste/dupont_pompton/index.html and the official site repository located at the NJDEP records center. Information on upcoming CAG meetings is posted to the EPA Pompton Lakes/DuPont website, as well as on EPA's Pompton Lakes/DuPont Facebook page at <https://www.facebook.com/groups/284334294243/> and the official Pompton Lakes/DuPont CAG website at <http://www.pomptonlakescag.org/>. The site's Facebook page is updated frequently by the CIC and contains photographs, information on public meetings, recent news related to the site, as well as community discussions and comments. The NJDEP also maintains a webpage related to the Pompton Lakes/DuPont site (http://www.state.nj.us/dep/srp/community/sites/dupont_pompton_lakes/), which includes fact sheets, information on the vapor intrusion study and other site information. ATSDR (http://www.atsdr.cdc.gov/HAC/pha/dupontpompton/eid_toc.html) and the New Jersey Department of Health and Senior Services (<http://www.state.nj.us/health/eoh/cehsweb/dupontpomptonlakes.htm>) also maintain webpages, which provide health-related information specific to the Pompton Lakes community. Other citizens' action and interest groups have also formed within the Pompton Lakes community in regard to the Pompton Lakes/DuPont site.

FMC Middleport, Middleport, NY
RCRA Corrective Action

FMC's Middleport Facility is a 91-acre pesticide formulation and packaging plant that manufactured arsenic-based and other pesticide products from 1943 to 1985. As a result of past manufacturing operations and waste disposal practices, chemicals (primarily arsenic) that affected soil, sediment, surface water, and groundwater have been released from the facility and to areas offsite. This environmental contamination is being addressed by the New York State Department of Environmental Conservation (NYSDEC) and USEPA Region 2 under a joint RCRA Section 3008(h) consent order. The New York State Department of Health (NYSDOH) is consulted on all issues affecting human health.

EPA, NYSDEC, and NYSDOH staff, as well as FMC representatives and elected officials, meet regularly with members of the Middleport Community Input Group (MCIG). The MCIG is primarily comprised of Middleport residents and provides a medium through which government agencies, FMC, and the local community can exchange information and ideas. In addition, the MCIG has the services of an environmental scientist who has been hired to review technical documents and explain complex issues to the MCIG. This resource to the MCIG was established through EPA's TASC program. EPA, NYSDEC, and NYSDOH also keep in frequent contact with the local, state and federal elected and Royalton-Hartland school officials (which is adjacent to the FMC site) to provide them with information and receive their input on environmental issues. The Agencies, in addition to FMC, periodically conduct public information sessions in the community. As a result of these community engagement activities, many members of the community have raised concerns over the loss of full-growth trees associated with the potential excavation of contaminated soils. To address these concerns, pilot studies have been conducted and remedial measures are being explored through a corrective measures study. This study will help determine the feasibility of soil remedial alternatives that would allow for tree preservation. NYSDEC maintains a website for this site at: <http://www.dec.ny.gov/chemical/54220.html>.

Region 3

Merck Sharp and Dohme, Stonewall Facility, Elkton, VA

RCRA Corrective Action

Merck Sharp and Dohme's Stonewall facility is located in northwestern Virginia, approximately two miles southwest of Elkton. The facility property lies within the Shenandoah Valley, just southeast of the South Fork of the Shenandoah River. The facility occupies approximately 1,300 acres, of which 89 acres are used for active operation. The facility began operation in 1941. Prior to that, the land was undeveloped. The facility includes a pharmaceutical laboratory and manufacturing facilities, which produce animal and human health care products (pharmaceuticals). The facility is permitted to store hazardous wastes in containers and is currently in the Corrective Measures Implementation (CMI) phase of RCRA Corrective Action. The primary contaminants of concern in groundwater include benzene, chlorobenzene, chloroform, methylene chloride, naphthalene, trichloroethene, vinyl chloride, and vanadium. The constituents of concern in surface and subsurface soils include several VOCs (volatile organic compounds) and SVOCs (semi-volatile organic compounds).

Merck Sharp and Dohme has developed a Community Relations Plan, which includes provisions for addressing citizens' questions and concerns throughout the RCRA Corrective Action process via annual community information sharing sessions at the Elkton Elementary School. In addition, Merck regularly issues community newsletters highlighting remediation progress, issues quarterly newsletters, and holds annual community advisory meetings. Region 3 has a website for this site:

<http://www.epa.gov/reg3wcmd/ca/va/webpages/vad001705110.html>

Cook Composites and Polymers Company, Chatham, VA

RCRA Corrective Action

The Cook Composites and Polymers (CCP) facility in Chatham, Virginia, occupies approximately 101 acres of property in the Tight Squeeze Industrial Park. The CCP facility primarily produces unsaturated polyester resins for use in the manufacturing of fiberglass boats, bathroom fixtures, sinks, and related specialty composite products. The primary constituents of concern in soil are benzene, toluene, ethylbenzene, and xylenes (BTEX), acetone, methyl-ethyl ketone, and methyl-isobutyl ketone. Primary constituents of concern in groundwater are BTEX, acetone, and manganese.

The CCP facility is undergoing final remedy selection and planned to hold a public meeting in June 2011. The facility holds semi-annual community advisory committee meetings at the local high school to provide interested community members with environmental status updates in addition to general plant operation status updates, including upgrades, repairs, modifications, and health and safety. Meeting minutes are developed and disseminated to all stakeholders. Region 3 has a website for this site:

<http://www.epa.gov/reg3wcmd/ca/va/webpages/vad055046049.html>

Region 4

Cavenham Forest Industries, Gulfport, MS

RCRA Corrective Action

Cavenham Forest Industries (CFI) in Gulfport, Mississippi, is a former wood treatment plant that operated from 1906 to 1986. The facility is contaminated with creosote, pentachlorophenol, polycyclic aromatic hydrocarbons, and petroleum products, such as diesel fuel. EPA RCRA Corrective Action at the site has been on-going since the late 1990s under its EPA HSWA (Hazardous and Solid Waste Amendments) Permit. Work completed at the site includes the installation of a complex groundwater treatment system, hydraulic containment at a former creosote pond, and on-site wastewater treatment.

Portions of the community adjacent to the CFI site contain homes classified as a historic minority community. CFI and the surrounding community were flooded with waves up to twenty feet in height from the Bernard Bayou Seaway during Hurricane Katrina.

There are numerous community involvement and non-governmental stakeholders. They include: Turkey Creek Watershed Implementation Team (Steering Committee), Turkey Creek Homeowners Association, Turkey Creek Community Initiatives, North Gulfport Community Land Conservancy, Sierra Club, Audubon Mississippi, Land Trust for Mississippi Coastal, White Civic Organization, Mt. Pleasant UMC Environmental Ministry, and Center for Environmental and Economic Justice.

Several community meetings have been held by both EPA and the Mississippi Department of Environmental Quality (MDEQ). Community leaders are kept informed of remediation activities through formal permit renewal meetings and ad-hoc meetings scheduled with EPA. The Sierra Club is very active in the oversight of the cleanup activities at the facility. One community organization, the Turkey Creek Homeowners Association, actively participates in environmental discussions associated with CFI and has hired an environmental consultant to review data from remediation activities.

The partnership of the Trustee for the closed site, the interested public and private sector organizations and the community residents have demonstrated a positive ongoing approach toward effective community engagement.

Kuhlman Electric, Crystal Springs, MS

PCB-contaminated Site

Kuhlman Electric is an active transformer manufacturing facility in Crystal Spring, Mississippi. In 2000, both onsite and offsite soils were discovered to be contaminated with PCBs. The cleanup of soils onsite has been completed, as has remediation of all adjoining properties, including some residential parcels. Current work is focused on a ditch that leaves the site property, passes through a wooded area, and eventually flows under Highway 51 and into a small lake.

In an effort to involve all in the process of solving the Kuhlman challenges, the MDEQ's Office of Community Engagement implemented a pilot project designed to increase the flow of information

between the state and the community, provide easy access to educational information, and provide a way for community members to share their concerns. Components of the pilot project include:

- Development of a newsletter for dissemination to Crystal Spring's citizens, which contains educational information and information for contacts from MDEQ and its Office of Community Engagement;
- Development of the state's first local library surplus computer donation program to help citizens connect to the internet to search for additional information about the site; and
- Convening several public meetings in conjunction with Crystal Spring's grassroots organization—the Concerned Citizens Against Pollution—where open dialogue about the site takes place.

As the pilot project implemented in Crystal Springs proves to be feasible, MDEQ will explore ways for using the techniques learned from this process in other communities.

The MDEQ Office of Community Engagement's electronic file room for this facility can be found at: http://www.deq.state.ms.us/mdeq.nsf/page/CE_KuhlmanElectricCorporationCrystalSpringsMS?OpenDocument

Walter Coke Facility, North Birmingham, AL
RCRA Corrective Action Site

Walter Coke (formerly Sloss Industries) has been operating in Birmingham, Alabama, since 1920, processing coal to produce coke for fuel use in blast furnaces and foundries in the steel industry. In 1989, EPA issued a RCRA Section 3008(h) Administrative Order to Walter Coke to assess potential contamination regulated by RCRA onsite and offsite from operation of the facility.

In the summer of 2009, Walter Coke agreed to sample yards, drainage areas, and public areas in North Birmingham. The purpose was to investigate soils for the presence of chemicals of potential concern, namely arsenic and benzo(a)pyrene toxicity equivalents (BaP TEQ). EPA provided oversight of these sampling activities, which were conducted at 76 selected properties, including residential yards, schools, public housing, rights-of-way, a church, and property offsite of the Walter Coke facility. In November 2010, the EPA and the ATSDR held "one-on-one" information sessions with the property owners or renters to answer questions about the investigation results for their property. A broader environmental session, which included representatives of the facility, was held on May 19, 2011, at a nearby public school. At this session, EPA shared the 2009 residential and school soil sampling results with the community at large and discussed current and next steps to address soil contamination in the community. EPA Region 4 maintains a webpage for community outreach related to the Walter Coke Facility in its electronic reading room, which is available at: http://www.epa.gov/region4/foiapgs/readingroom/rcra_community/walter.html. This webpage provides updates on the site, information about public meetings, fact sheets on urban gardening and health effects related to the two contaminants of concern found in North Birmingham neighborhoods, EPA Sampling Maps, and a list of frequently asked questions (FAQs).

In November 2011, the offsite soil contamination in the residential neighborhoods was referred to Superfund. The RCRA Division maintains the lead for the on-site assessment and cleanup. EPA Region 4 is using the “One EPA” approach to address air, water and land issues impacted by the facility. This has been able to provide more extensive information to community residents and is seen as an opportunity to incorporate more tools for effective cleanup and ongoing engagement of the residents.

Region 5

Bridgestone Americas Tire Operations (formerly the Firestone Industrial Products Company), Noblesville, IN PCB Cleanup

The Firestone Industrial Products Company facility, which is now owned by Bridgestone Americas Tire Operations, operated a rubber products manufacturing facility from 1936 to 2009. PCB-containing heat-transfer fluid was used at the facility in the late 1960s and early 1970s. It is believed that floor and roof drain outfalls at the facility released PCBs to Wilson Ditch, an engineered drainage channel that flows south from the facility for approximately 5,000 feet before draining into Stony Creek. In the spring of 2009, Firestone voluntarily sampled low lying areas adjacent to Wilson Ditch. This was in response to residents’ concerns that there may be PCB contamination that could pose a health risk and that the previous cleanup of the Wilson Ditch may not have corrected all problems.

EPA conducted extensive public outreach during 2008 and 2009 by distributing documents, holding availability sessions with residents, receiving public comments, and revising work plans based on comments. EPA met with residents individually in their homes and presented them with two cleanup options for their property. One option excavated all soil with contamination levels exceeding one part PCB per million parts soil. The other option, which was generally selected by most homeowners, was based on risk-based contamination levels and homeowner input. Most residents wanted the risk-based standard applied so their entire yards would not be torn up during excavation and trees would be preserved. Many of these homeowners chose to have “hot spots” of PCB contamination removed from their yards and backfilled. EPA coordinated with the State of Indiana to ensure there were no land restrictions on private property after the cleanup, and “No Further Action” letters were provided to homeowners to be used during future real estate transactions. EPA maintains a website (<http://www.epa.gov/region5/cleanup/rcra/firestone/>) to keep the public informed about site activities at the facility. This site includes links to site updates, news releases, fact sheets, technical documents, and information about public meetings.

U.S. Smelter & Lead Refinery Site, East Chicago, IN RCRA Corrective Action

The U.S. Smelter & Lead Refinery Site in East Chicago, Indiana, operated as a lead smelting facility on a 79 acre tract of land from 1920 to 1985. Lead waste had been dumped onto the surface area south of the former plant building. Fugitive dust and emissions from an onsite stack released lead particulates into the air. This particulate matter may have been deposited on nearby residential yards. The site was originally proposed for the National Priorities List in 1992, but consideration was put on hold when the Agency

decided to pursue cleanup under the RCRA program. Lead waste was removed and properly disposed offsite. Lead contaminated soil and sediments were consolidated and contained in an onsite management unit.

During comment periods in 1996, the U.S. EPA accepted comments on the proposed remedy for the use of a Corrective Action Management Unit (CAMU) at the facility. Upon completion of public participation, U.S. EPA issued a CAMU designation and response to comments for the USS Lead facility. The Indiana Department of Environmental Management (IDEM) set a public comment period on the Draft Post-Closure Permit, which closed on September 14, 2008. The official public notice was published on July 31, 2007, in a local paper, and broadcast over local radio station WJOB. In December 2009, U.S. EPA held informational sessions to explain EPA and IDEM's process for testing soil on residential property and to answer questions. The Public Notice for this session was provided in both English and Spanish. An information repository for the site is located at the East Chicago Public Library.

U.S. EPA Region 5 maintains a website for the site, which is located at: <http://www.epa.gov/region5/cleanup/usslead/index.htm>. It includes links to news releases, fact sheets, and public meetings.

Region 6

Kewa Pueblo (formerly known as Pueblo of Santo Domingo), NM Cross-Program Revitalization of a RCRA site.

The cleanup and revitalization of Kewa Pueblo, New Mexico, is a real-life example of how cross-program coordination can help revitalize an area. The Pueblo owned a former industrial site and an old trading post with underground storage tanks, both of which were located on tribal land (referred to as the Domingo Area). One of the sites had been assessed by a contractor under an EPA Targeted Brownfields Assessment grant. The results of this assessment indicated that site contamination was extensive (potentially costing millions of dollars), based on the contractor's assumptions regarding cleanup levels/future use.

EPA Region 6's RCRA program was asked to review the assessment report. In response, they applied risk-based decision making incorporating realistic future use scenarios to determine the level of remediation needed to safely reuse the site. EPA Region 6 developed its own sampling workplan, and used RCRA contract funds to conduct a supplemental investigation at the site, as well as an adjoining debris landfill. They installed additional monitoring wells and conducted soil investigations. The data from their investigations demonstrated that the site was fairly clean with respect to an industrial use standard and could be further cleaned to a residential standard, if desired. EPA Region 6 presented its findings to the Tribal Governor, the Tribal Council, and a number of other stakeholders, which helped the tribe realize that cleanup of the property could be managed as redevelopment occurs. EPA Region 6 worked closely with the tribe to identify potential funding sources for cleanup and revitalization of the site, including convening a broad stakeholder meeting to share information and garner commitment/support from attendees for the revitalization of the area. (Numerous tribal members participated in this meeting.) During this meeting, EPA demonstrated the EPA/US Army Corps of

Engineers “Vision to Action” design/community engagement tool. As a result of these efforts, the tribe was awarded American Recovery and Reinvestment Act of 2009 funding to address confirmed releases from underground storage tanks. The National Park Service awarded a \$17,000 Route 66 Corridor Preservation Grant to a Santa Fe non-profit, Cornerstone Community Partnership, to conduct an engineering study to ascertain whether the Pueblo’s historic trading post could be rebuilt. In addition, EPA funded \$619,000 under an Interagency Agreement with DHHS’s Indian Health Service to upgrade the public water supply to the main housing area, as well as well as the Domingo Area across the highway. The tribe also was awarded a \$1 million grant from the Economic Development Administration to rebuild the trading post, a \$450,000 grant from the U.S. Department of Housing to help meet housing needs, and an \$828,304 project funded through U.S. Department of Agriculture (USDA) Rural Development’s Water and Environmental Program to complete the Pueblo’s water mains. The site was redeveloped as a mass transit stop on the New Mexico Rail Runner Express commuter line, which opened on March 22, 2010. Future redevelopment plans include a restaurant and other services for Rail Runner commuters, tourists, and local residents. Recently, the Region 6 RCRA Program has been partnering with the Kewa Pueblo on a renewable energy feasibility study to be conducted by the US DOE’s National Renewable Energy Lab. In addition, the Pueblo has applied for a competitive EPA Brownfields Cleanup grant for the industrial site, based on the extensive investigatory data available.

Delfasco Forge Site, Grand Prairie, TX
RCRA Corrective Action Site

For over 30 years, the Delfasco Forge facility was a manufacturer of practice bombs for the U.S. Department of Defense. From 1981 until 1997, the facility used the site for metal forging and fabrication that applied degreasing agents containing TCE. Studies in 2003-2005 indicated that degreaser spills and releases led to contamination of shallow groundwater extending below an adjacent 65-acre area with approximately 500 homes and six light industrial businesses.

The Delfasco neighborhood is a stable, low-income, multi-ethnic (primarily Caucasian, Hispanic, and Vietnamese) community, with several generations of family members often sharing a home. Many of the families in this area have lived in their homes for 40 or more years. In May 2008, the EPA RCRA program collected air samples from 16 residences and two commercial buildings located in the neighborhood adjacent to the Delfasco site, where TCE concentrations in groundwater were the highest. Analyses of these samples found that TCE vapors from the groundwater are migrating through the soil and into the homes located above the plume. EPA and other stakeholders spent many hours with members of the Delfasco community to communicate and coordinate activities necessary to investigate and mitigate the vapor intrusion pathway. Some of the challenges encountered by the Delfasco Team included language barriers, overall mistrust of the federal government, and availability of homeowners, who often worked multiple jobs.

Much of the community outreach involved door-to-door calls on residents to explain the sampling project, encourage participation, obtain access agreements, and discuss sampling results. Translators were provided by both the EPA and the City of Grand Prairie to assist with both house calls and public meetings. Often, this work was performed on nights and weekends in order to accommodate the residents’ schedules. All informational materials were distributed in both English and Spanish. As a testament to the

degree of trust built between EPA and the residents, on several occasions, EPA staff were invited by families to join them for dinner.

During the investigation, EPA, ATSDR, the Texas Department of State Health Services, and the City of Grand Prairie hosted three public meetings at the local community center to explain the nature and extent of the investigation, initial sampling results, health implications, and next steps. This close involvement with the community has forged a lasting bond which will be invaluable in moving forward with future efforts in the neighborhood. EPA again will begin interactions with the community in the summer of 2012 as it moves forward with the installation of approximately 75-100 mitigation systems in the neighborhood. This phase of the project was delayed while the property owner went through bankruptcy proceedings. The Region is now working with the US Bankruptcy Court-appointed Trustee to implement the remedy.

Austin Energy Holly Street Power Plant, Austin, TX
RCRA Corrective Action/PCB Site

Constructed 1960-1974, the Holly Street plant was designed to run on natural gas, with fuel oil as an alternative. At its peak, Holly produced up to 558 megawatts. Its location in a residential neighborhood adjacent to Lady Bird Lake resulted in considerable pressure to retire/decommission the plant, which occurred in 2007. The actual deconstruction, which was originally planned for the summer of 2010, began in October 2011.

For several years now, Austin Energy has been holding monthly meetings with active neighborhood residents. EPA staff attended one such meeting, along with staff from the US Army Corps of Engineers, to demonstrate the EPA/USACE “Vision to Action” design/community engagement tool. EPA has also participated in stakeholder meetings with Austin Energy, The University of Texas at Austin’s School of Landscape Architecture, Austin Parks Department, local architects, and others. Austin Energy has conducted the majority of community engagement activities, including newsletters, site visits/open houses, and a bi-lingual website (www.holly.austinenergy.com). EPA has provided recommendations to Austin Energy on sustainable decommissioning of the electrical power plant. In addition, EPA has offered recommendations for sustainably revitalizing the property as a public park. EPA meets regularly with Austin Energy and the Austin Parks Department officials to review the progress towards dismantling the facility (EPA is the lead agency for any PCB contamination) and the redevelopment. A consultant has been hired to prepare a master plan for the redevelopment phase. EPA plans to participate, along with local residents, in a design charrette for the future public park.

Kelly Air Force Base, San Antonio, TX
RCRA Corrective Action Site

EPA Region 6 is responsible for its states’ Base Realignment and Closure (BRAC) sites, which includes Kelly Air Force Base (AFB) in San Antonio, Texas. Kelly AFB formerly occupied approximately 4,000 acres on the southwest side of San Antonio. The Air Force Real Property Agency (AFRPA) retains the responsibility for conducting all environmental restoration activities on the former Kelly AFB, including 2,107 acres that were realigned to Lackland AFB.

The community became involved in Kelly's cleanup even before 1994, when the Restoration Advisory Board (RAB) was created from the Technical Review Committee. The RAB was created to provide an expanded opportunity for stakeholder involvement in the environmental restoration process at Kelly AFB. Other community outreach tools used by the site include an information repository, numerous public meetings, public notices, and public comment periods held throughout the life cycle of the environmental restoration program, and one-on-one interviews with community members, RAB members, partner agency staff, local officials, and community leaders. The Southwest Workers Union's Committee for Environmental Justice Action (CEJA) is a local community organization that represents families and former workers impacted by the contamination of the former Kelly AFB. CEJA has been very involved with Kelly AFB for many years.

EPA involvement with the community started with being an active member of the RAB. In response to community concerns that the RAB didn't represent all of the community, EPA met with CEJA one-on-one to discuss concerns with the off-base groundwater plumes and vapor intrusion potential. During this time EPA met with the local health agency and local congressional representatives and their staffs and conducted two rounds of vapor intrusion sampling in multiple neighborhoods at many sites identified by the community surrounding the former base. EPA met with each home owner to explain the results and held two public meetings to discuss the sampling objectives and the results.

Hillcrest/Dona Park Community, Corpus Christi, TX

An Environmental Justice Community Affected by RCRA Permitted Facilities

The Hillcrest community in Corpus Christi, Texas, is an environmental justice community that sits on the fence line of an area known as "Refinery Row," which has the densest concentration of refineries in the nation. The community is concerned about health effects from refinery emissions. In 2008, Texas A&M University Health Science Center scientists and the Citizens for Environmental Justice (CFEJ) conducted a pilot study that detected benzene in the blood of some Hillcrest community residents. In response to these results, and at the request of Hillcrest community, the Texas Commission on Environmental Quality (TCEQ) planned an investigation called the Hillcrest Community Environmental Investigation (HCEI). The HCEI was to determine whether there are environmental impacts from VOCs to soil, groundwater, or ambient air. The TCEQ held numerous meetings with the community to discuss issues related to the HCEI and to solicit feedback and input.

In 2009, U.S. EPA officials requested that the Regional Health Awareness Board (RHAB) get involved in outreach efforts to the Hillcrest community. The RHAB is an organization of community volunteers that aids awareness about public health, safety, and environmental issues, coordinates communication between groups working on the same issues, and provides assistance to citizens on where to turn to for information and where to get involved. Since its involvement, the RHAB has been active in maintaining communications with the various agencies who are working to solve the issues of the Hillcrest community through conference calls, by attending community meetings, and by providing up-to-date information via its website (http://www.coastalbendrhab.org/Home_Page.php), publications, and presentations.

In addition to meetings held by TCEQ where EPA attended and addressed concerns directed at the Agency by the community, EPA has invested considerable resources in addressing concerns with groundwater contamination. This has involved meeting with the community leaders to discuss concerns with potential vapor intrusion issues. EPA has also split samples with TCEQ to address concerns the community had with trusting industry results. Recently the RCRA program has completed an independent study of groundwater flow and the potential for contamination to migrate off-site and under the Hillcrest neighborhood.

Encycle, a former RCRA facility, borders the Corpus Christi Ship Channel and a high priority environmental justice community, Dona Park. From 1941 to 1985, Encycle produced high grade zinc for American Smelting and Refining Company (ASARCO). From 1988 to 2002, Encycle managed a commercial waste management facility for recycling, reclamation and volume reduction. They ceased operations in 2003 and began facility closure activities until 2005 when they filed bankruptcy and vacated the property. In December 2009, ASARCO reached a settlement with EPA in one of the largest environmental bankruptcies in U.S. history. A trustee was appointed to oversee remediation of the Encycle site. EPA Region 6 and the TCEQ are working in partnership to oversee the trustee's actions including split sampling and ensuring that the demolition and remediation do not impact the nearby Dona Park community. In addition, the agencies are keeping the community informed of activities through conference calls, by attending community meetings, and by providing up-to-date information via its website (http://www.tceq.texas.gov/remediation/sites/encycle_facility/encycle/).

To address issues that the Dona Park community has had being a neighbor to an ASARCO related company, TCEQ conducted a comprehensive case file review of past assessments and cleanups conducted in Dona Park neighborhood in partnership with EPA Region 6. Although multiple investigations and soil removal actions had been conducted in the neighborhood since 1994, there remained concerns in the community about potential contamination or residential soils. TCEQ's objective was to address these remaining concerns.

Region 7

Chamberlain Manufacturing Corporation Facility, Waterloo, Iowa RCRA Corrective Action

Chamberlain Manufacturing, located on a 22.8-acre property in Waterloo, Iowa, operated from 1953 to 1996. The company manufactured metal washer wringers, projectile metal parts, aluminum awnings and refrigerator shelves, among other items. Historical collaboration between the EPA Team and the Chamberlain Manufacturing Corporation resulted in extensive investigations of soil and groundwater contamination at the site. After negotiations failed to reach an agreement for mitigation, the EPA issued a Unilateral Administrative Order to Chamberlain.

The Chamberlain EPA Team has effectively promoted collaboration with stakeholders at the site to facilitate project progress and community engagement concerning difficult site conditions. The team sought to engage the community throughout the implementation of vapor intrusion investigations at a residential neighborhood adjacent to the site. EPA explained its draft plans and solicited comments from community members at a public availability session on its draft work plans for vapor intrusion sampling

and mitigation. Copies were provided to interested citizens and placed at the site repository that was established at Waterloo City Hall.

EPA and its partners (the City of Waterloo, Iowa State Department of Natural Resources partners, U.S. Geological Survey, and the Blackhawk County Health Department) also have held several other public availability sessions to educate citizens on the complicated technical issues at the site, inform them of project progress and listen and respond to citizen questions and concerns. The informal sessions were held in a church near the site and purposely kept informal and time allotted for one-on-one visiting. The availability sessions provided an opportunity to explain EPA's plans and to sit down with individual community members to explain complex vapor intrusion risk issues in an understandable way.

Public availability sessions are advertised with mailings, newspaper advertisements, and radio announcements. Tools used at the sessions include Progress Fact Sheets, other handouts, and posters. Citizens are encouraged to call a toll free number or email EPA contacts with questions and concerns.

Chanute, Kansas Project Team *RCRA Permitting*

Significant public interest in the recent re-issuance of Ash Grove Cement's hazardous waste management permit provided a unique opportunity to address the community's public health concerns and to apply new approaches and techniques to engage the community with EPA and Kansas Department of Health and Environment's (KDHE) regulatory activities in Chanute, Kansas. Chanute is a small town (pop. 9,119) in southeast Kansas established in the 1870s as a railroad town. Ash Grove established its first Portland cement manufacturing facility there in 1908. Ash Grove utilizes hazardous waste as fuel in the cement kiln and was issued the first boiler and industrial furnace permit under RCRA in 1996. Ash Grove replaced and expanded their cement production in 2000, increasing the types and amounts of hazardous waste combusted. Ash Grove's RCRA permit was re-issued in 2010.

Ash Grove's initial permit was of national interest to environmental groups and hazardous waste combustion competitors. EPA provided a grant in September 1997 to the University of Kansas Medical Center to study air pollution, cancer and respiratory health in Southeast Kansas due to public concerns about the four hazardous waste combustion facilities in the area. At that time, four such facilities were operating within a 30 mile radius (three cement companies and one incinerator). The grantee conducted public meetings in all study communities regarding the work plan and held meetings in the same communities to present the report.

Public health concerns in Chanute were again highlighted during the public comment period to re-issue the Ash Grove hazardous waste permit. To provide the community with ample opportunity to fully describe the public health concerns, EPA and KDHE extended the public comment period and held a public hearing for the Ash Grove hazardous waste permit. Prior to the public hearing, a public meeting was held where the community could ask questions and get additional information from technical staff regarding the draft hazardous waste permit and public health staff from KDHE and ATSDR regarding

public health concerns. As one result, KDHE reviewed public health data regarding the community's health concerns and reported their findings.

Subsequently, EPA and KDHE have partnered to form the Chanute project team, consisting of managers, counsel, and technical and regulatory experts in RCRA and air and water monitoring and compliance. The team is committed to expanding the engagement of the community in regulator activities and regular meetings, similar to town hall meetings, have been held in Chanute to provide the community with information on various topics relevant to the community, such as hazardous materials transport, environmental sampling, waste water discharges, air pollution, etc. Periodic mailings are also used to update the community of significant activities. Additional methods to disseminate important information to the community will be investigated to provide the most convenient and meaningful information sharing. The project team has developed key points of contact to get immediate feedback and time sensitive information to and from the community. These activities will continue and can be used as a model for similar projects.

As a result of the community's public health concerns, KDHE's public health findings and review of available environmental data, the project team has developed a short-term air sampling plan to gather information that will be useful in the locating new expanded ambient air monitors in Chanute. The project team has also worked with KDHE in developing a water sampling plan for Village Creek, which is located near Chanute, to update information on surface water, sediment and fish tissue from previous sampling conducted under KDHE's statewide sampling program.

Region 8

Pueblo Chemical Depot, Pueblo, CO *RCRA Corrective Action and Permitting*

The U.S. Army Pueblo Chemical Depot (PCD) located near Pueblo, Colorado, is one of five remaining Army installations in the United States that currently store or are in the process of destroying a stockpile of chemical weapons. The PCD comprises eight percent of the nation's original chemical material stockpile. The U.S. Army Element Assembled Chemical Weapons Alternatives (ACWA) is the Department of Defense's program responsible for the destruction of the chemical weapons stockpile in storage at PCD. Working in partnership with the community, neutralization followed by biotreatment was selected in 2002 to destroy the Pueblo chemical weapons stockpile. The Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) is currently under construction near the storage site.

PCD and PCAPP work closely with the Colorado Chemical Demilitarization Citizens' Advisory Commission, which serves as a forum for exchanging information about the project, offers opportunities for the public to get involved, and represents community and state interests to the Army and Department of Defense. The Chemical Stockpile Emergency Preparedness Program works closely with community and state emergency professionals to develop emergency plans and provide chemical accident response equipment and warning systems.

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division has authority to regulate the United States Army's program to destroy the assembled chemical weapons stored at Pueblo Chemical Depot. The Division fully supports public involvement early and often in the permit process. Documents available for this program are made available on the Department's website to ensure that the public has every opportunity possible to be informed and involved as this project evolves (<http://www.cdphe.state.co.us/hm/pcd/index.htm>).

The U.S. Army Chemical Materials Agency, which is responsible for safely storing and destroying the nation's aging chemical weapons stockpile, maintains a website (<http://www.cma.army.mil/home.aspx>) where they post news releases, publications, photos, and reports to update the public about what is happening at PCD. PCD publishes a quarterly newsletter called *The Environmental Monitor* for the citizens of Pueblo County and surrounding communities to keep them updated on RCRA-permitted environmental restoration activities going on at the Depot. There also are four local information repositories where citizens can go to stay informed about the Depot's activities. The facility has a Restoration Advisory Board (RAB) that was established using DoD/EPA Guidance (1994). The RAB holds quarterly community meetings that are co-chaired by the PCD Commander and a community member.

Frontier Petroleum Refinery, Cheyenne, WY
RCRA Corrective Action Site

Frontier Refining Inc., (Frontier) owns and operates a petroleum refinery located within the City of Cheyenne, Wyoming. The refinery operation encompasses approximately 117 acres and has been operating since 1934 under a number of owners and operators. Frontier purchased the refinery in 1988. Refinery products include gasoline, diesel, asphalt, liquid propane gas, coker gas oil, petroleum coke, and sulfur.

Frontier is nearing completion of the RCRA Facility Investigation (RFI) phase of the corrective action process, including human health and ecological risk assessments. Reports have been submitted, and a schedule has been developed to discuss the reports, to provide final Agency comments, and to develop the path forward to the Corrective Measures Study and implementation of remedies. Frontier recently reactivated the Community Action Panel (CAP). The CAP is a group that meets to discuss various topics, including safety, construction, and coordination. The CAP includes citizens as well as a range of stakeholders, including schools, utilities, local businesses and other individuals and organizations showing an interest in the refinery operations. The RCRA corrective action process was discussed during a CAP meeting, and the opportunity to give future presentations to the CAP regarding site cleanup is in place.

A Community Relations Plan was developed by Frontier, WY Department of Environmental Quality and U.S. EPA Region 8, which describes the corrective action process and provides access to information on the cleanup process at the site. The WY DEQ maintains a Frontier Refinery Community Relations webpage to keep the public informed about activities at the refinery. This page is located at <http://deq.state.wy.us/shwd/HW/HWPCA/Frontier%20Community%20Relations.htm>. It includes contact information, links to the facility's Community Relations Plan, the Project Charter, and monthly project

status reports. The Department also maintains an e-mail list that is used to inform the public about upcoming public meetings, and maintains copies of documents for public review. Citizens are welcome to contact the company or the project managers regarding the project.

Region 9

Kettleman Hills Chemical Waste Management (CWM) facility, Kettleman City, CA RCRA Permitting Facility and PCB Site

The Kettleman Hills Chemical Waste Management (CWM) facility is part of a major international waste handling corporation. It is a permitted hazardous waste treatment, storage, and disposal facility located on 499 acres of a 1,600 acre parcel. Municipal sewer waste disposal activity began at Kettleman Hills in the 1960s and 1970s. The facility continues to accept most types of hazardous waste for treatment, storage, and disposal and handles PCB, non-PCB hazardous waste, and solid waste. Kettleman City is a rural, unincorporated community with 1,500 residents in southwestern Kings County. The community covers approximately 118 acres and consists of a highway commercial area and a residential area. Most of the residents are employed by local farming operations or other related industries.

A Draft Environmental Justice Assessment was released by EPA Region 9 in 2007. Its primary purpose was to inform the PCB permitting review process. The same year, EPA Region 9 opened a public comment period on the draft Toxic Substances Control Act (TSCA) federal permit renewal requested to continue to store and dispose of PCB waste at the CWM facility. During the extended public comment period and community meetings throughout 2008, the community raised concerns that wind-blown PCB particles from the CWM facility operations could either be deposited offsite and taken up into the food chain or could migrate from the facility as air emissions and impact Kettleman City. EPA put the TSCA permit decision on hold and requested that CWM complete a PCB Congener Study to evaluate the potential for offsite migration of PCBs. The results of the study raised concerns from Greenaction and Center on Race, Poverty and the Environment (CRPE). EPA Region 9 held meetings with these groups in both the Regional Office and in Kettleman City to respond to their concerns. Additionally, EPA Region 9 produced and posted to its website a formal written response to the group's concerns, which explained EPA's role in the process and provided answers and clarification to the concerns.

On February 6, 2009, EPA hosted a public meeting at the Kettleman City School to provide an update on the current status of the CWM PCB permit renewal and expansion application. During the meeting, EPA technical staff met with community stakeholders who have expressed PCB risk concerns. The meeting was conducted in English, with simultaneous Spanish interpretation. On August 12, 2009, EPA and other local, state, and federal agencies participated in a community-organized listening session focused on concerns about birth defects and other health issues. EPA provided a neutral facilitator and simultaneous translation services in English and Spanish.

In January 2010, the Governor directed the California Environmental Protection Agency (Cal/EPA) and the California Department of Public Health (CDPH) to investigate an apparent increase in the number of infants born with birth defects after 2006 in Kettleman City. The city's community members had raised concerns about birth defects and questioned whether there was a link to the CWM facility. Before

commencing the investigation, state officials went door-to-door to notify residents of activities that would occur during the investigation process. The investigation represented an unprecedented effort by multiple programs within EPA, Cal/EPA and CDPH to examine specific public health concerns within an individual community. Over 100 comments were received from the community in relation to the findings of the investigation. CDPH provided written responses to all of the comments. On November 17, 2011, Region 9 also hosted a workshop and meeting in the community, along with other state and local agencies. The workshop and meeting provided information on the facility's RCRA and TSCA permitting process, past enforcement actions, and results of an indoor pesticide sampling study conducted in homes throughout the community. As part of their proposed permit decision, Region 9 will host another informational meeting and formal hearing, and formally respond to comments prior to making a final permit decision. All new information related to the site is available to the public in English and Spanish and is posted on the EPA website: <http://www.epa.gov/region9/kettleman/>.

Romic Environmental Technologies Corporation, East Palo Alto, CA
RCRA Corrective Action

Romic Environmental Technologies Corporation (Romic) is a 12.6-acre former hazardous management facility located in East Palo Alto, California. Romic operated from approximately 1964 until 2007. Historical facility operations include solvent recycling, fuel blending, wastewater treatment, and hazardous waste storage and treatment. The primary contaminants in the soil and groundwater are volatile organic compounds (VOCs) such as TCE. The closure process has been completed at the facility and it has since been demolished. The site is undergoing RCRA Corrective Action.

In the last several years, the Romic site has received much attention from community groups and the general public. The Youth for Community Action (YUCA) group, whose members are primarily high school students, has been involved with the Romic facility since before it closed. During and after the closure process, EPA Region 9 and the California Department of Toxic Substances Control (CA DTSC) met with YUCA to explain the types of activities that will be completed as part of the RCRA Corrective Action process and answer any questions. During facility closure, Romic's contractor sent monthly updates to YUCA and interested community members and placed hard copies in the local public library. To reach the broader community, EPA Region 9 sponsored a display booth at the East Palo Alto City Cinco de Mayo festival. To keep the community informed throughout the corrective action process, EPA Region 9 has produced two videos of site activities. The first video highlighted the bioremediation process chosen to clean up the site. The second video highlighted the aftermath of the site's demolition. Both videos were aired on local news broadcasts and were widely successful in engaging the public with the site. EPA Region 9 also holds public meetings, including additional meetings when requested by the community. All written outreach materials are distributed in English and Spanish. EPA Region 9 maintains a website for the Romic site: <http://www.epa.gov/region9/waste/romic-eastpaloalto/>.

Region 10

FMC Pocatello, Pocatello, ID

RCRA Closure

Since opening in 1949, the FMC plant in Pocatello was a large elemental phosphorus producing facility. The plant closed on December 10, 2001, due primarily to rising electric power costs. After demolition was completed in 2006, FMC worked with local officials to assess the potential redevelopment of the property. Prior to plant closure, the community and the Shoshone-Bannock tribe were concerned about health effects from plant emissions. After the plant closed, concerns shifted to job loss and the reduction in the tax base.

In December 2002, the Governor of Idaho established the Idaho Optimum Initiative Task Force to seek redevelopment of the FMC site. In October 2003, this Task Force received a grant from EPA's One Cleanup program to involve, educate, and receive input from the Shoshone-Bannock tribe and the local community. EPA's place-based staff member was invited to participate in Task Force activities to ensure that redevelopment options were compatible with cleanup strategies for the site, and permitting requirements for new development were understood.

Through a Memorandum of Understanding (MOU), EPA and the Shoshone-Bannock Tribes established a formal process for sharing information and communicating about environmental protection issues that affect the tribe's Fort Hall Reservation. The MOU outlines expectations and responsibilities related to staff coordination, formal consultation, decision making, and other interactions. About three years ago, the tribe employed a community engagement staff member, who has been instrumental in improving attendance at tribal meetings. Public meetings regarding the FMC Pocatello site usually are held twice—one at the Fort Hall Reservation and one in downtown Pocatello. EPA Region 10 publishes a newsletter called the *Southeast Idaho Update*, which keeps the public informed about work being done in the Pocatello and Fort Hall areas.

Community Involvement Program/Activities by State Environmental Agencies

Connecticut Department of Environmental Protection

As of January 1, 2009, the Connecticut Department of Environmental Protection (CT DEP) requires applicants seeking a permit for a new or expanded "applicable facility" that is proposed to be located in an "environmental justice community," to file an Environmental Justice Public Participation Plan with and receive approval from the Department prior to filing any application for such permit. The Connecticut Department of Economic and Community Development (DECD) defines environmental justice communities as distressed municipalities or as census block groups with 30 percent of their population living below 200 percent of the federal poverty level. CT DEP maintains a list of these municipalities on its website at http://www.ct.gov/dep/cwp/view.asp?a=2688&Q=432364&depNav_GID=1511.

Since implementing a requirement for an Environmental Justice Public Participation Plan, the CT DEP has noticed that permit applications are being approved faster, and have resulted in less adjudication. They also enable facilities to recognize the need to be a good neighbor earlier in the process. The CT DEP acknowledges that there is no one-size fits all approach for every facility, but that requiring a public participation plan is a good faith effort to ensure that facilities conduct outreach with their communities. CT DEP also acknowledges the need to make the development of a public participation plan as easy as possible for their facilities. Therefore, they developed a standard PDF form http://www.ct.gov/deep/lib/deep/environmental_justice/EJ_Plan.pdf, which guides permit applicants through the EJ Public Participation Plan process.

Massachusetts Department of Environmental Protection

RCRA state-delegated sites are regulated under the Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Site Cleanup, and its associated regulation entitled the Massachusetts Contingency Plan. This regulation is specific to the requirements for investigation and remediation and includes public involvement requirements throughout the remedial process. There are certain public involvement requirements for all sites; and additional requirements for sites that generate a high level of community interest, including petitioning the Department to designate the site as a Public Involvement Site. The MassDEP maintains a public involvement webpage, where the public can access information about public notice requirements, informational notices to property owners, how the public is involved at various stages during a cleanup, and how the public can better understand the public involvement plan process. To obtain a list of actions, the public can search through various databases that are linked through the MassDEP site at <http://www.mass.gov/dep/cleanup/sites/sdown.htm>. The MassDEP recognizes the value of using social media as a tool for communicating with the public. For example, MassDEP maintains a Flickr account to share photos (<http://www.flickr.com/photos/massdep/>) of events and response actions, and has a Twitter account (@massdep or <https://twitter.com/MassDEP>) which acts as the Department's official feed. Any messages ending in K are sent by Commissioner Ken Kimmell.

Mississippi Department of Environmental Quality

Since 2000, the Mississippi Department of Environmental Quality (MDEQ) has focused on better serving underserved communities by increasing transparency and making the agency more accessible to the public. Improvements have been made by increasing MDEQ's online presence, developing trust with leaders who represent diverse constituencies, and hosting community meetings, briefings, and listening sessions in communities affected by RCRA sites and other environmental issues. MDEQ also has offered training opportunities and increased information-sharing internally to assist staff members in identifying potential environmental justice issues. This increased sensitivity allows for more proactive interaction with the public.

MDEQ established an environmental justice coordinator and created a new Office of Community Engagement to assist communities facing environmental issues. The Office of Community Engagement's primary goals are to:

- Develop transparent and accessible decision-making processes to enable meaningful community stakeholder participation;

- Present information in ways that will enable community stakeholders to better understand environmental issues and participate in an informed way during the decision-making process; and,
- Produce outcomes that are responsive to stakeholder concerns and help meet community needs and long-term goals to the extent practicable.

In 2010, MDEQ doubled its community outreach activities from 2009. The Department participated in more than 70 face-to-face meetings representing environmental justice communities and implemented a pilot project to determine the feasibility of new methods for engaging the public. MDEQ attributed its increased outreach to several policy changes, including:

- Use of the existing electronic notification system within MDEQ's internal Complaint Tracking System that alerts the Office of Community Engagement to sites with potential environmental justice interest;
- Creation of an internal MDEQ Community Engagement workgroup for improving communications and outreach activities agency-wide;
- Use of the internet to provide instant access by the public to information about potential environmental justice sites;
- Placement of information in Mississippi libraries concerning contaminated sites located within potential environmental justice communities; and,
- Implementation of a citizens' survey to determine best practices for engaging the public, resulting in four external meetings during 2010 in which MDEQ conducted listening sessions.

South Carolina Department of Health and Environmental Control

The South Carolina Department of Health and Environmental Control's (SC DHEC's) community involvement program for RCRA sites recognizes the need to go beyond what is required in the RCRA regulations by engaging the community early in the process, building trust, and working with industry to encourage them to do more than what is strictly required by regulation.

SC DHEC's current approach to community involvement is the result of a concerted effort, which began in 2003, to rethink and improve public participation at hazardous waste and permitting sites throughout the state. This involved looking at then-current practices, re-training staff, reallocating resources, and maintaining a strong management commitment to promoting community involvement. "Lessons Learned" by South Carolina from this effort include:

- Community involvement at RCRA and Superfund sites should not be treated differently. Neither program should conduct community involvement using a "checklist" approach focusing strictly on regulatory requirements and activities mandated at various milestones in the process.
- It is important to get out in the community early—often before a permit application is submitted or a corrective action plan is drafted. If a community has concerns, SC DHEC will meet with them, even if there is little information to share. It is important to be honest about what agencies know or do not know about a site. While technical staff often is reluctant to go into a community until they have

investigative or risk information, SC DHEC has found that it is not necessary to wait for full information before talking with the community. For example, if the extent of a contaminant plume is not yet defined, do not be concerned to tell the community just that. However, be prepared to let them know when more information is expected to be made available. The key is to be honest and build trust.

- Many times, quality of life issues (e.g., traffic patterns at certain times of the day, dust, and noise) are a primary concern for communities. These issues can be addressed if they are known early in the process.
- Industry usually is willing to do more community involvement work than is required under the regulations, if asked to do so. SC DHEC staff meets with facilities early and encourages them to engage the community early, usually even before submitting a permit application. This is particularly important when a facility is likely to generate significant concern or controversy or will be located in communities where there already is heightened interest or environmental justice issues. Many times, facilities can be persuaded that engaging the community early will help build trust and could minimize potential problems later in the process.
- Environmental justice is an important aspect of overall community involvement work. If community needs are being met, environmental justice concerns will be addressed.

SC DHEC takes a flexible approach to community involvement, based on the community's needs. Sometimes, public meetings are the best approach. Other times, less formal community meetings (e.g., at places of worship with community groups) are more effective. In still other situations, personal, one-on-one communication is needed. One size does not fit all, and often a combination of approaches is necessary. When public notices via the "Legal Notices" section in the local newspaper are not required, SC DHEC often notifies the public through other means. SC DHEC found that public notices in the "Legal Notices" section of local newspapers were hard to find, seldom read, difficult to understand, and expensive to post. Instead, SC DHEC often contacts residents in affected areas by postcard. Whenever possible, SC DHEC (or the facility) talks directly to residents, particularly in small communities where word-of-mouth communication is the norm. SC DHEC offers simple, easy-to-read fact sheets on sites, as well as on the permitting and corrective action processes.

SC DHEC sets up dedicated webpages, which are linked from its public participation page, for sites with heightened community interest. One example is the Johnson Controls site (see <http://www.scdhec.gov/environment/JCI/>). Upon request, SC DHEC will mail hard copies of information on its website to accommodate the needs of community members who do not have Internet access. SC DHEC also tries to use a cross-program, "one agency" approach to community involvement whenever possible. The various programs within SC DHEC (such as Air, Water, Superfund, and RCRA) share information, experiences, and mailing lists from community outreach and engagement efforts undertaken for a particular community. SC DHEC makes an effort to schedule joint public meetings as "one agency" at sites with cross-program issues. Not only does this prevent duplication of effort, it helps ensure that the "right people," who truly are representative of community concerns, are at the table. This approach enables the public to see SC DHEC as one agency rather than as separate programs.

SC DHEC recognizes the value of Community Advisory Groups (CAGs). This is evident in SC DHEC's air program, which is creating CAGs, especially for environmental justice communities, for its rulemaking process.

Other State Environmental Agency Community Involvement Highlights

- The Utah Department of Environmental Quality publishes fact sheets for all of its high-profile facilities on its website (<http://www.hazardouswaste.utah.gov/permits.htm>).
- The Colorado Department of Public Health and Environment has a full-time staff member who works on community involvement issues.
- The New Mexico Department of the Environment recently appointed a new Public Information Officer. New Mexico is home to many large sites with RCRA components that garner a lot of public attention. These include Sandia National Labs, Los Alamos National Laboratory, and Kirtland Air Force Base.
- Many state environmental agencies maintain Facebook, Twitter, and other social media pages to communicate with the public about events and issues related to their department.

Key Practices for Enhanced Community Engagement

The review of community engagement efforts undertaken at RCRA Corrective Action, permitting, and PCB-contaminated sites throughout the country identified a number of tools and techniques that often are used to promote community engagement at these sites. Some of these tools, including public notices, public meetings, fact sheets and newsletters are among the community engagement tools and techniques used at many hazardous waste sites. Another group of key practices, including Community Involvement Plans, Community Advisory Groups, and Technical Assistance Services for Communities, represent effective enhancements to basic community engagement efforts and are often used at sites where site issues are challenging and community interest is high.

Community Involvement Plans

A Community Involvement Plan (CIP), sometimes called a Community Relations Plan or Public Participation Plan, is a site-specific strategy to enable meaningful community involvement throughout the permitting or cleanup process. CIPs lay out a plan for involving the community at specific sites to address community needs, concerns, and expectations that are identified through community interviews and other means.

A good CIP will enable community members affected by a site to understand the ways in which they can participate in the permitting or cleanup process.

While not required by regulation for RCRA sites, EPA and many states sometimes prepare site-specific CIPs or negotiate agreements with facilities that require them to prepare and implement a CIP. One example is the Chamberlain Manufacturing Corporation Facility in Waterloo, Iowa, for which Region 7 prepared a CIP modeled after CIPs used at Superfund sites.

While CIPs for RCRA sites take many forms, they generally include (1) a description of the site, its history, and the key issues related to site contamination and the cleanup effort; (2) a description of the affected community, which may include a summary of demographics and identification of significant subgroups in the population, languages spoken, and other important characteristics of the affected community; (3) a summary of the issues of concern to residents, identified through community interviews, informal discussions and interactions with residents and stakeholder groups, local media reports, and other insights about the affected community; and (4) an action plan that describes how future activities undertaken by the facility, state, or EPA will address identified community needs, concerns, questions and expectations regarding site cleanup and how the lead will communicate with the public. The Action Plan identifies the appropriate communications methods and forums that will be used to provide opportunities for public input, consultation, and involvement throughout the process.

Community Advisory Groups

Community Advisory Groups (CAGs) are an important aspect of a number of the community involvement efforts presented in this report. CAGs are an umbrella term for a panel or committee made up of representatives of diverse community interests. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the corrective action or permitting process, and to serve as the focal point for the exchange of information among the local community and EPA, the state regulatory agency, the facility, and other stakeholders. CAGs mentioned in this report include the Community Advisory Panel for the Sporting Goods Property in Bridgeport, CT (pg 6); the CAG at the Pompton Lakes site in Pompton Lakes, NJ (pg 7); The Middleport Community Involvement Group at the FMC Middleport, NY site (pg 9); and the community advisory committee for Merck Sharpe and Dohme, Stonewall Facility in Elkton, VA (pg 10), to name a few.

CAGs can help EPA, the state, and the facility make better decisions on how to clean up a site. They offer EPA a unique opportunity to hear and seriously consider community preferences for site remediation. CAGs also can help build trust among diverse stakeholder groups and a forum for resolving competing interests, particularly at sites with numerous and sometimes competing stakeholder and community groups. EPA may assist communities in determining the need for a CAG by helping them evaluate the level of community interest in and concern about site activities. EPA or the state agency may also examine if there is an existing broad-based group that might function as a CAG. The key is to ensure that the CAG will be fully representative of the community and will be able to function effectively as a group.

Technical Assistance Services for Communities (TASC)

During the RCRA Corrective Action process, regional or state-led teams may work with communities to educate them about the cleanup process and technical issues. Often this informal type of technical assistance is sufficient to permit the communities to participate in the cleanup process effectively.

However, in some cases, communities need additional, more formal technical assistance to enable them to participate in site decision-making in a meaningful way.

EPA's TASC program is a relatively new resource that may be available to communities at selected RCRA Corrective Action sites. TASC provides independent, non-advocacy educational and technical assistance to communities affected by hazardous waste sites through an EPA headquarters contract. While most TASC assistance is provided to communities at Superfund sites, TASC services also are available on a limited basis to sites regulated by RCRA.

TASC offers technical assistance services tailored to each community's needs. Its purpose is to empower communities by helping them better understand technical issues related to hazardous waste sites so they can better articulate their concerns and preferences for EPA to consider during decision making processes related to sites. Technical assistance services available through the TASC program are described on the TASC website at: www.epa.gov/superfund/community/tasc.

TASC assistance can be particularly useful at sites where there are complex technical issues, community interest is high, and there is a potential for controversy or conflict over site issues. One example is the Pompton Lakes/Dupont site in New Jersey (pg 7), where TASC has provided expert facilitation and capacity-building for a new community advisory group that includes representatives of various segments of the community. The TASC contractor at the Pompton Lakes/Dupont site also is preparing a "situational assessment" to help EPA better understand the dynamics of the community and identify potential community issues and concerns. At the Asarco site in El Paso, Texas, the TASC contractor is providing an independent review of EPA's draft remedial workplan to enable the community to better understand and more effectively comment on the document. Region 4 has used TASC to provide assistance at sites in Alabama and Mississippi through community environmental educational forums. The training has provided basic information needed by residents to better understand actions being taken to address the contamination.

Use of Social Media and Other Key Practices

The practices described above have been used for years in EPA's cleanup programs. Other key practices, including creative use of social media, are evolving in response to rapid changes in how people get and share information.

Social media tools, such as Facebook, Twitter, and YouTube, are being used by EPA, the states, facilities, and community groups to convey information to a wide audience rapidly. After holding a face-to-face meeting, for example, social media can be used to give the community updates and announce upcoming events. Facebook is being used by EPA and the states to give up-to-date information on specific sites, such as Pompton Lakes. EPA Regions 2, 3, 6, and 9 use Twitter to convey messages that are accessible via the Twitter website and can be sent to mobile devices. EPA Region 9 has found videos to be very successful in communicating progress at RCRA sites, and posts many of their videos on YouTube.

While social media can be a successful tool to instantly reach out to interested parties, it should not be considered a replacement for face-to-face interaction. Personal interactions give the agencies and facilities

an opportunity to ask community members how they want to be involved in the decision-making process and whether there are other community members who should be involved. One-on-one interactions are especially important when contamination has migrated under and inside of residential properties. In the instances of Pompton Lakes and the Delfasco Forge site, where vapor intrusion was an issue, and the Bridgestone Americas Tire Operations Site, where excavation of private residential properties was needed, the agencies involved went door-to-door to talk to residents about the contamination that could potentially be affecting their homes, the health and safety issues associated with the contamination, and to get permission to work on their properties. These one-on-one meetings were critical to properly addressing the issues at these sites.

Tailoring Community Engagement Activities to Individual Sites.

As discussed earlier in this document, RCRA corrective action sites come in a variety of sizes, extent of contamination and potential exposure, complexity, and are located in a variety of situations. As a result, community engagement activities are tailored to fit site circumstances. Sites where there is minimal contamination, little or no potential for exposure, and proven straightforward approaches to cleanup may conduct the baseline for community engagement. Sites with known or potential exposure, vulnerable communities or communities with special needs, or community interest may undergo more extensive community engagement activities. At the very minimum, citizens can learn basic information and cleanup status about all RCRA Corrective Action sites from the web-based program [Cleanups in my Community \(www.epa.gov/cimc\)](http://www.epa.gov/cimc) .

Conclusion

A great deal of community engagement work is being done in the RCRA program, by both regulators and regulated facilities. There is no one-size-fits-all approach to involving and engaging communities living near RCRA hazardous waste sites. RCRA program implementers make initial decisions on what type and level of community engagement is appropriate at what type of sites, considering factors such as whether there is off-site contamination and potential human exposure, whether there are vulnerable communities or environmental justice concerns, or whether there is a high level of community interest. Many PCB contaminated sites have similar approaches and considerations. It is in the best interest of the agencies and the facilities involved to listen to communities early in the process and to learn from them about which tools will work best for engaging their community. This approach will help to make the community engagement process at a RCRA site more successful and meaningful for everyone involved.