United States
Environmental Protection
Agency

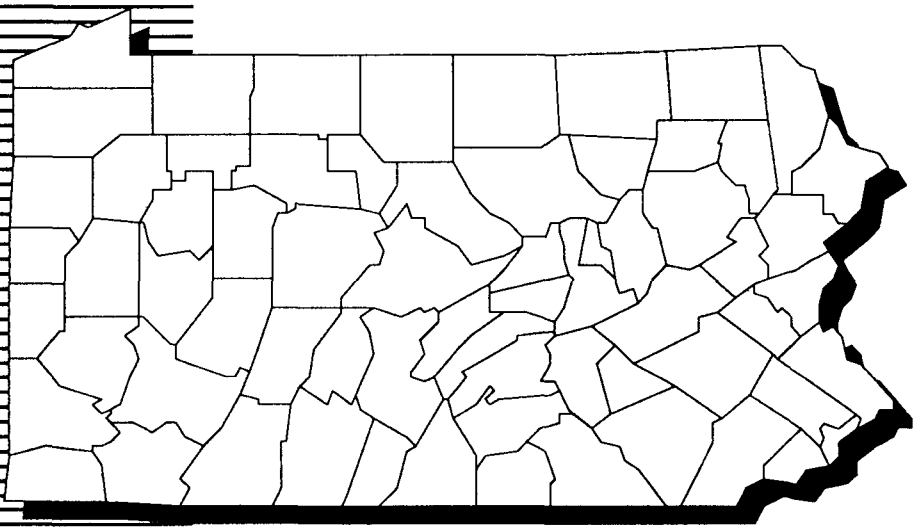
Solid Waste And
Emergency Response
(OS-240)

EPA/540/8-91/052
September 1991
PB92-963240

EPA

National Priorities List Sites:

PENNSYLVANIA



1991

Printed on Recycled Paper

Publication #9200.5-738A
September 1991

NATIONAL PRIORITIES LIST SITES:
Pennsylvania

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Office of Program Management
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The National Overview volume, **Superfund: Focusing on the Nation at Large (1991),** may be ordered as PB92-963253.

The complete set of the overview documents, plus the 49 state reports may be ordered as PB92-963253.

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A Brief Overview

WHY THE SUPERFUND PROGRAM?

As the 1970s came to a close, a series of headline stories gave Americans a look at the dangers of dumping industrial and urban wastes on the land. First there was New York's Love Canal. Hazardous waste buried there over a 25-year period contaminated streams and soil, and endangered the health of nearby residents. The result: evacuation of several hundred people. Then the leaking barrels at the Valley of the Drums in Kentucky attracted public attention, as did the dioxin-tainted land and water in Times Beach, Missouri.

In all these cases, human health and the environment were threatened, lives were disrupted, and property values were reduced. It became increasingly clear that there were large numbers of serious hazardous waste problems that were falling through the cracks of existing environmental laws. The magnitude of these emerging problems moved Congress to enact the Comprehensive Environmental Response, Compensation, and Liability Act in 1980. CERCLA — commonly known as Superfund — was the first Federal law established to deal with the dangers posed by the Nation's hazardous waste sites.

After Discovery, the Problem Intensified

Few realized the size of the problem until the Environmental Protection Agency (EPA) began the process of site discovery and site evaluation. Not hundreds, but thousands of potential hazardous waste sites existed, and they presented the Nation with some of the most complex pollution problems it had ever faced.

Since the Superfund program began, hazardous waste has surfaced as a major environmental concern in every part of the United States. It wasn't just the land that was contaminated by past disposal practices. Chemicals in the soil were spreading into the groundwater (a source of drinking water for many) and into streams, lakes, bays, and wetlands. Toxic vapors contaminated the air at some sites, while improperly disposed or stored wastes threatened the health of the surrounding community and the environment at others.

The EPA Identified More than 1,200 Serious Sites

The EPA has identified 1,245 hazardous waste sites as the most serious in the Nation. These sites comprise the National Priorities List; sites targeted for cleanup under Super-fund. But site discoveries continue, and the EPA estimates that, while some will be deleted after lengthy cleanups, this list, commonly called the NPL, will continue to grow by approximately 50 to 100 sites per year, potentially reaching 2,100 sites by the year 2000.

THE NATIONAL CLEANUP EFFORT IS MUCH MORE THAN THE NPL

From the beginning of the program, Congress recognized that the Federal government could

not and should not address all environmental problems stemming from past disposal practices. Therefore, the EPA was directed to set priorities and establish a list of sites to target. Sites on the NPL (1,245) thus are a relatively small subset of a larger inventory of potential hazardous waste sites, but they do comprise the most complex and compelling cases. The EPA has logged more than 35,000 sites on its national inventory of potentially hazardous waste sites and assesses each site within one year of being logged.

THE EPA IS MAKING PROGRESS ON SITE CLEANUP

The goal of the Superfund program is to tackle immediate dangers first and then move through the progressive steps necessary to eliminate any long-term risks to public health and the environment.

Superfund responds immediately to sites posing imminent threats to human health and the environment at both NPL sites and sites not on the NPL. The purpose is to stabilize, prevent, or temper the effects of a release of hazardous substances, or the threat of one, into the environment. These might include tire fires or transportation accidents involving the spill of hazardous chemicals. Because they reduce the threat a site poses to human health and the environment, immediate cleanup actions are an integral part of the Superfund program.

Immediate response to imminent threats is one of Superfund's most noted achievements. Where imminent threats to the public or environment were evident, the EPA has initiated or completed emergency actions that attacked the most serious threats of toxic exposure in more than 2,700 cases.

The ultimate goal for a hazardous waste site on the NPL is a permanent solution to an environmental problem that presents a serious threat to the public or the environment. This often requires a long-term effort. The EPA has aggressively accelerated its efforts to perform these long-term cleanups of NPL sites. More cleanups were started in 1987, when the Superfund law was amended, than in any previous year. By 1991, construction had started at more than four times as many sites as in 1986! Of the sites currently on the NPL, more than 500 — nearly half — have had construction cleanup activity. In addition, more than 400 more sites presently are in the investigation stage to determine the extent of site contamination and to identify appropriate cleanup remedies. Many other sites with cleanup remedies selected are poised for the start of cleanup construction activity. In measuring success by "progress through the cleanup pipeline," the EPA clearly is gaining momentum.

THE EPA MAKES SURE CLEANUP WORKS

The EPA has gained enough experience in cleanup construction to understand that environmental protection does not end when the remedy is in place. Many complex technologies — like those designed to clean up groundwater — must operate for many years in order to accomplish their objectives.

The EPA's hazardous waste site managers are committed to proper operation and maintenance of every remedy constructed. No matter who has been delegated responsibility for monitoring the cleanup work, the EPA will assure that the remedy is carefully followed and that it continues to do its job.

Likewise, the EPA does not abandon a site even after the cleanup work is done. Every five years, the Agency reviews each site where residues from hazardous waste cleanup still remain to ensure that public and environmental

health are being safeguarded. The EPA will correct any deficiencies discovered and will report to the public annually on all five-year reviews conducted that year.

CITIZENS HELP SHAPE DECISIONS

Superfund activities also depend upon local citizen participation. The EPA's job is to analyze the hazards and to deploy the experts, but the Agency needs citizen input as it makes choices for affected communities.

Because the people in a community where a Superfund site is located will be those most directly affected by hazardous waste problems and cleanup processes, the EPA encourages citizens to get involved in cleanup decisions. Public involvement and comment does influence EPA cleanup plans by providing valuable information about site conditions, community concerns, and preferences.

The State and U.S. Territories volumes and the companion National overview volume provide general Superfund background information and descriptions of activities at each NPL site. These volumes clearly describe what the problems are, what the EPA and others participating in site cleanups are doing, and how we, as a Nation, can move ahead in solving these serious problems.

USING THE STATE AND NATIONAL VOLUMES TOGETHER

To understand the big picture on hazardous waste cleanup, citizens need to hear about both environmental progress across the country and the cleanup accomplishments closer to home. Citizens also should understand the challenges involved in hazardous waste cleanup and the decisions we must make, as a Nation, in finding the best solutions.

The National overview, *Superfund: Focusing on the Nation at Large (1991),* contains important information to help you understand the magnitude and challenges facing the Superfund program, as well as an overview of the National cleanup effort. The sections describe the nature of the hazardous waste problem nationwide, threats and contaminants at NPL sites and their potential effects on human health and the environment, vital roles of the various participants in the cleanup process, the Superfund program's successes in cleaning up the Nation's serious hazardous waste sites, and the current status of the NPL. If you did not receive this overview volume, ordering information is provided in the front of this book.

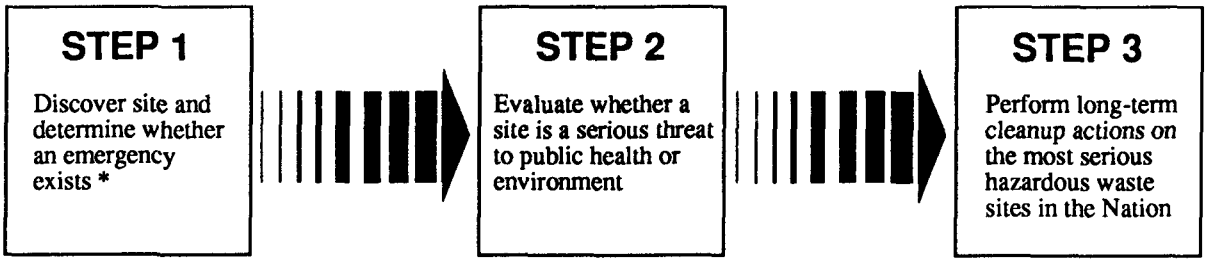
This volume compiles site summary fact sheets on each State or Territorial site being cleaned up under the Superfund program. These sites represent the most serious hazardous waste problems in the Nation and require the most complicated and costly site solutions yet encountered. Each book gives a "snapshot" of the conditions and cleanup progress that has been made at each NPL site. Information presented for each site is current as of April 1991. Conditions change as our cleanup efforts continue, so these site summaries will be updated annually to include information on new progress being made.

To help you understand the cleanup accomplishments made at these sites, this volume includes a description of the process for site discovery, threat evaluation, and long-term cleanup of Superfund sites. This description, *How Does the Program Work to Clean Up Sites?,* will serve as a reference point from which to review the cleanup status at specific sites. A glossary defining key terms as they apply to hazardous waste management and site cleanup is included as Appendix A in the back of this book.

How Does the Program Work to Clean Up Sites?

The diverse problems posed by hazardous waste sites have provided the EPA with the challenge to establish a consistent approach for evaluating and cleaning up the Nation's most serious sites. To do this, the EPA has had to step beyond its traditional role as a regulatory agency to develop processes and guidelines for each step in these technically complex site cleanups. The EPA has established procedures to coordinate the efforts of its Washington, D.C. Headquarters program offices and its front-line staff in ten Regional Offices, with the State and local governments, contractors, and private parties who are participating in site cleanup. An important part of the process is that any time during cleanup, work can be led by the EPA or the State or, under their monitoring, by private parties who are potentially responsible for site contamination.

THREE-STEP SUPERFUND PROCESS



** Emergency actions are performed whenever needed in this three-step process.*

The process for discovery of the site, evaluation of threat, and the long-term cleanup of Superfund sites is summarized in the following pages. The phases of each of these steps are highlighted within the description. The flow diagram above provides a summary of the three-step process.

Although this book provides a current "snapshot" of site progress made only by emergency actions and long-term cleanup actions at Superfund sites, it is important to understand the discovery and evaluation process that leads to identifying and cleaning up these most serious uncontrolled or abandoned hazardous

waste sites in the Nation. The discovery and evaluation process is the starting point for this summary description of Superfund involvement at hazardous waste sites.

STEP 1: SITE DISCOVERY AND EMERGENCY EVALUATION

How does the EPA learn about potential hazardous waste sites?

Site discovery occurs in a number of ways. Information comes from concerned citizens. People may notice an odd taste or foul odor in their drinking water or see half-buried leaking barrels; a hunter may come across a field where waste was dumped illegally. There may be an explosion or fire, which alerts the State or local authorities to a problem. Routine investigations by State and local governments and required reporting and inspection of facilities that generate, treat, store, or dispose of hazardous waste also help keep the EPA informed about actual or potential threats of hazardous substance releases. All reported sites or spills are recorded in the Superfund inventory (CERCLIS) for further investigation to determine whether they will require cleanup.

What happens if there is an imminent danger?

As soon as a potential hazardous waste site is reported, the EPA determines whether there is an emergency requiring an immediate cleanup action. If there is, they act as quickly as possible to remove or stabilize the imminent threat. These short-term emergency actions range from building a fence around the contaminated area to keep people away, or temporarily relocating residents until the danger is addressed, to providing bottled water to residents while their local drinking water supply is being cleaned up or physically removing wastes for safe disposal.

However, emergency actions can happen at any time an imminent threat or emergency warrants them. For example, if leaking barrels are found when cleanup crews start digging in the ground or if samples of contaminated soils or air show that there may be a threat of fire or explosion, an immediate action is taken.

STEP 2: SITE THREAT EVALUATION

If there isn't an imminent danger, how does the EPA determine what, if any, cleanup actions should be taken?

Even after any imminent dangers are taken care of, in most cases, contamination may remain at the site. For example, residents may have been supplied with bottled water to take care of their immediate problem of contaminated well water, but now it's time to determine what is contaminating the drinking water supply and the best way to clean it up. The EPA may determine that there is no imminent danger from a site, so any long-term threats need to be evaluated. In either case, a more comprehensive investigation is needed to determine if a site poses a serious, but not imminent, danger and whether it requires a long-term cleanup action.

Once a site is discovered and any needed emergency actions are taken, the EPA or the State collects all available background information not only from their own files, but also from local records and U.S. Geological Survey maps. This information is used to identify the site and to perform a preliminary assessment of its potential hazards. This is a quick review of readily available information to answer the questions:

- Are hazardous substances likely to be present?

- How are they contained?
- How might contaminants spread?
- How close is the nearest well, home, or natural resource area such as a wetland or animal sanctuary?
- What may be harmed — the land, water, air, people, plants, or animals?

Some sites do not require further action because the preliminary assessment shows that they do not threaten public health or the environment. But even in these cases, the sites remain listed in the Superfund inventory for record-keeping purposes and future reference. Currently, there are more than 35,000 sites maintained in this inventory.

If the preliminary assessment shows a serious threat may exist, what's the next step?

Inspectors go to the site to collect additional information to evaluate its hazard potential. During this *site inspection*, they look for evidence of hazardous waste, such as leaking drums and dead or discolored vegetation. They may take some samples of soil, well water, river water, and air. Inspectors analyze the ways hazardous materials could be polluting the environment, such as runoff into nearby streams. They also check to see if people (especially children) have access to the site.

How does the EPA use the results of the site inspection?

Information collected during the site inspection is used to identify the sites posing the most serious threats to human health and the environment. This way, the EPA can meet the requirement that Congress gave them to use Superfund monies only on the worst hazardous waste sites in the Nation.

To identify the most serious sites, the EPA developed the Hazard Ranking System (HRS). The HRS is the scoring system the EPA uses to assess the relative threat from a release or a potential release of hazardous substances from a site to surrounding groundwater, surface water, air, and soil. A site score is based on the likelihood that a hazardous substance will be released from the site, the toxicity and amount of hazardous substances at the site, and the people and sensitive environments potentially affected by contamination at the site.

Only sites with high enough health and environmental risk scores are proposed to be added to the NPL. That's why 1,245 sites are on the NPL, but there are more than 35,000 sites in the Superfund inventory. Only NPL sites can have a long-term cleanup paid for from Superfund, the national hazardous waste trust fund. Superfund can, and does, pay for emergency actions performed at any site, whether or not it's on the NPL.

Why are sites proposed to the NPL?

Sites proposed to the NPL have been evaluated through the scoring process as the most serious problems among uncontrolled or abandoned hazardous waste sites in the U.S. In addition, a site will be proposed to the NPL if the Agency for Toxic Substances and Disease Registry issues a health advisory recommending that people be moved away from the site. The NPL is updated at least once a year, and it's only after public comments are considered that these proposed worst sites officially are added to the list.

Listing on the NPL does not set the order in which sites will be cleaned up. The order is influenced by the relative priority of the site's health and environmental threats compared to other sites, and such factors as State priorities, engineering capabilities, and available tech-

nologies. Many States also have their own list of sites that require cleanup; these often contain sites that are not on the NPL and are scheduled to be cleaned up with State money. And, it should be noted again that any emergency action needed at a site can be performed by the Superfund, whether or not a site is on the NPL.

A detailed description of the current progress in cleaning up NPL sites is found in the section of the 1991 National overview volume entitled *Cleanup Successes: Measuring Progress.*

How do people find out whether the EPA considers a site a national priority for cleanup under the Superfund Program?

All NPL sites, where Superfund is responsible for cleanup, are described in the State and Territorial volumes. The public also can find out whether other sites, not on the NPL, are being addressed by the Superfund program by calling their Regional EPA office or the Superfund Hotline at the numbers listed in this book.

STEP 3: LONG-TERM CLEANUP ACTIONS

After a site is added to the NPL, what are the steps to cleanup?

The ultimate goal for a hazardous waste site on the NPL is a permanent, long-term cleanup. Since every site presents a unique set of challenges, there is no single all-purpose solution. A five-phase "remedial response" process is used to develop consistent and workable solutions to hazardous waste problems across the Nation:

1. *Remedial Investigation*: investigate in detail the extent of the site contamination
2. *Feasibility Study*: study the range of possible cleanup remedies
3. *Record of Decision or ROD*: decide which remedy to use
4. *Remedial Design*: plan the remedy
5. *Remedial Action*: carry out the remedy

This remedial response process is a long-term effort to provide a permanent solution to an environmental problem that presents a serious threat to the public or environment.

The first two phases of a long-term cleanup are a combined *remedial investigation and feasibility study* (RI/FS) that determine the nature and extent of contamination at the site and identify and evaluate cleanup alternatives. These studies may be conducted by the EPA or the State or, under their monitoring, by private parties.

Like the initial site inspection described earlier, a remedial investigation involves an examination of site data in order to better define the problem. However, the remedial investigation is much more detailed and comprehensive than the initial site inspection.

A remedial investigation can best be described as a carefully designed field study. It includes extensive sampling and laboratory analyses to generate more precise data on the types and quantities of wastes present at the site, the type of soil and water drainage patterns, and specific human health and environmental risks.

The result of the remedial investigation is information that allows the EPA to select the cleanup strategy that is best suited to a particular site or to determine that no cleanup is needed.

Placing a site on the NPL does not necessarily mean that cleanup is needed. It is possible for

a site to receive an HRS score high enough to be added to the NPL, but not ultimately require cleanup actions. Keep in mind that the purpose of the scoring process is to provide a preliminary and conservative assessment of *potential* risk. During subsequent site investigations, the EPA may find either that there is no real threat or that the site does not pose significant human health or environmental risks.

How are cleanup alternatives identified and evaluated?

The EPA or the State or, under their monitoring, private parties identify and analyze specific site cleanup needs based on the extensive information collected during the remedial investigation. This analysis of cleanup alternatives is called a *feasibility study*.

Since cleanup actions must be tailored exactly to the needs of each individual site, more than one possible cleanup alternative is always considered. After making sure that all potential cleanup remedies fully protect human health and the environment and comply with Federal and State laws, the advantages and disadvantages of each cleanup alternative are compared carefully. These comparisons are made to determine their effectiveness in the short and long term, their use of permanent treatment solutions, and their technical feasibility and cost.

To the maximum extent practicable, the remedy must be a permanent solution and must use treatment technologies to destroy principal site contaminants. Remedies such as containing the waste on site or removing the source of the problem (like leaking barrels) often are considered effective. Often, special pilot studies are conducted to determine the effectiveness and feasibility of using a particular technology to clean up a site. Therefore, the combined remedial investigation and feasibility study can take between 10 and 30 months to complete, depending on the size and complexity of the problem.

Does the public have a say in the final cleanup decision?

Yes. The Superfund law requires that the public be given the opportunity to comment on the proposed cleanup plan. Their concerns are considered carefully before a final decision is made.

The results of the remedial investigation and feasibility study, which also point out the recommended cleanup choice, are published in a report for public review and comment. The EPA or the State encourages the public to review the information and take an active role in the final cleanup decision. Fact sheets and announcements in local papers let the community know where they can get copies of the study and other reference documents concerning the site. Local information repositories, such as libraries or other public buildings, are established in cities and towns near each NPL site to ensure that the public has an opportunity to review all relevant information and the proposed cleanup plans. Locations of information repositories for each NPL site described in this volume are given in Appendix B.

The public has a minimum of 30 days to comment on the proposed cleanup plan after it is published. These comments can be written or given verbally at public meetings that the EPA or the State are required to hold. Neither the EPA nor the State can select the final cleanup remedy without evaluating and providing written answers to specific community comments and concerns. This "responsiveness summary" is part of the EPA's write-up of the final remedy decision, called the Record of Decision, or ROD.

The ROD is a public document that explains the cleanup remedy chosen and the reason it

was selected. Since sites frequently are large and must be cleaned up in stages, a ROD may be necessary for each contaminated resource or area of the site. This may be necessary when contaminants have spread into the soil, water, and air and affect such sensitive areas as wetlands, or when the site is large and cleaned up in stages. This often means that a number of remedies, using different cleanup technologies, are needed to clean up a single site.

? If every cleanup action needs to be tailored to a site, does the design ofthe remedy need to be tailored, too?

Yes. Before a specific cleanup action is carried out, it must be designed in detail to meet specific site needs. This stage of the cleanup is called the *remedial design*. The design phase provides the details on how the selected remedy will be engineered and constructed.

Projects to clean up a hazardous waste site may appear to be like any other major construction project but, in fact, the likely presence of combinations of dangerous chemicals demands special construction planning and procedures. Therefore, the design of the remedy can take anywhere from six months to two years to complete. This blueprint for site cleanup includes not only the details on every aspect of the construction work, but a description of the types of hazardous wastes expected at the site, special plans for environmental protection, worker safety, regulatory compliance, and equipment decontamination.

? Once the design is completed, how long does it take to actually clean up the site, and how much does it cost?

The time and cost for performing the site cleanup, called the *remedial action*, are as varied as the remedies themselves. In a few cases, the only action needed may be to remove drums of hazardous waste and to decontaminate them, an action that takes limited time and money. In most cases, however, a remedial action may involve different and expensive cleanup measures that can take a long time.

For example, cleaning polluted groundwater or dredging contaminated river bottoms can take several years of complex engineering work before contamination is reduced to safe levels. Sometimes the selected cleanup remedy described in the ROD may need to be modified because of new contaminant information discovered or difficulties that were faced during the early cleanup activities. Taking into account these differences, each remedial cleanup action takes an average of 18 months to complete and ultimately costs an average of $26 million to complete all necessary cleanup actions at a site .

? Once the cleanup action is completed, is the site automatically "deleted" from the NPL?

No. The deletion of a site from the NPL is anything but automatic. For example, cleanup of contaminated groundwater may take up to 20 years or longer. Also, in some cases, *long-term monitoring* of the remedy is required to ensure that it is effective. After construction of certain remedies, operation and maintenance (e.g., maintenance of ground cover, groundwater monitoring, etc.), or continued pumping and treating of groundwater may be required to ensure that the remedy continues to prevent future health hazards or environmental damage and ultimately meets the cleanup goals specified in the ROD. Sites in this final monitoring or operational stage of the cleanup process are designated as "construction complete."

It's not until a site cleanup meets all the goals and monitoring requirements of the selected

remedy that the EPA can officially propose the site for *deletion* from the NPL, and it's not until public comments are taken into consideration that a site actually can be deleted from the NPL. All sites deleted from the NPL and sites with completed construction are included in the progress report found later in this book.

Can a site be taken off the NPL if no cleanup has taken place?

Yes. But only if further site investigation reveals that there are no threats present at the site and that cleanup activities are not necessary. In these cases, the EPA will select a "no action" remedy and may move to delete the site when monitoring confirms that the site does not pose a threat to human health or the environment.

In other cases, sites may be "removed" from the NPL if new information concerning site cleanup or threats show that the site does not warrant Superfund activities.

A site may be removed if a revised HRS scoring, based on updated information, results in a score below the minimum for NPL sites. A site also may be removed from the NPL by transferring it to other appropriate Federal cleanup authorities, such as RCRA, for further cleanup actions.

Removing sites for technical reasons or transferring sites to other cleanup programs preserves Superfund monies for the Nation's most pressing hazardous waste problems where no other cleanup authority is applicable.

Can the EPA make parties responsible for the contamination pay?

Yes. Based on the belief that "the polluters should pay," after a site is placed on the NPL, the EPA makes a thorough effort to identify and find those responsible for causing contamination problems at a site. Although the EPA is willing to negotiate with these private parties and encourages voluntary cleanup, it has the authority under the Superfund law to legally force those potentially responsible for site hazards to take specific cleanup actions. All work performed by these parties is closely guided and monitored by the EPA and must meet the same standards required for actions financed through the Superfund.

Because these enforcement actions can be lengthy, the EPA may decide to use Superfund monies to make sure a site is cleaned up without unnecessary delay. For example, if a site presents an imminent threat to public health and the environment or if conditions at a site may worsen, it could be necessary to start the cleanup right away. Those responsible for causing site contamination are liable under the law (CERCLA) for repaying the money the EPA spends in cleaning up the site.

Whenever possible, the EPA and the Department of Justice use their legal enforcement authorities to require responsible parties to pay for site cleanups, thereby preserving Superfund resources for emergency actions and for sites where no responsible parties can be identified.

How to Use the State Book

The site fact sheets presented in this book are comprehensive summaries that cover a broad range of information. The fact sheets describe hazardous waste sites on the NPL and their locations, as well as the conditions leading to their listing ("Site Description"). The summaries list the types of contaminants that have been discovered and related threats to public and ecological health ("Threats and Contaminants"). "Cleanup Approach" presents an overview of the cleanup activities completed, underway, or planned. The fact sheets conclude with a brief synopsis of how much progress has been made in protecting public health and the environment. The summaries also pinpoint other actions, such as legal efforts to involve polluters responsible for site contamination and community concerns.

The fact sheets are arranged in alphabetical order by site name. Because site cleanup is a dynamic and gradual process, all site information is accurate as of the date shown on the bottom of each page. Progress always is being made at NPL sites, and the EPA periodically will update the site fact sheets to reflect recent actions and will publish updated State volumes. The following two pages show a generic fact sheet and briefly describe the information under each section.

HOW CAN YOU USE THIS STATE BOOK?

You can use this book to keep informed about the sites that concern you, particularly ones close to home. The EPA is committed to involving the public in the decision making process associated with hazardous waste cleanup. The Agency solicits input from area residents in communities affected by Superfund sites. Citizens are likely to be affected not only by hazardous site conditions, but also by the remedies that combat them. Site cleanups take many forms and can affect communities in different ways. Local traffic may be rerouted, residents may be relocated, temporary water supplies may be necessary.

Definitive information on a site can help citizens sift through alternatives and make decisions. To make good choices, you must know what the threats are and how the EPA intends to clean up the site. You must understand the cleanup alternatives being proposed for site cleanup and how residents may be affected by each one. You also need to have some idea of how your community intends to use the site in the future, and you need to know what the community can realistically expect once the cleanup is complete.

The EPA wants to develop cleanup methods that meet community needs, but the Agency only can take local concerns into account if it understands what they are. Information must travel both ways in order for cleanups to be effective and satisfactory. Please take this opportunity to learn more, become involved, and assure that hazardous waste cleanup at "your" site considers your community's concerns.

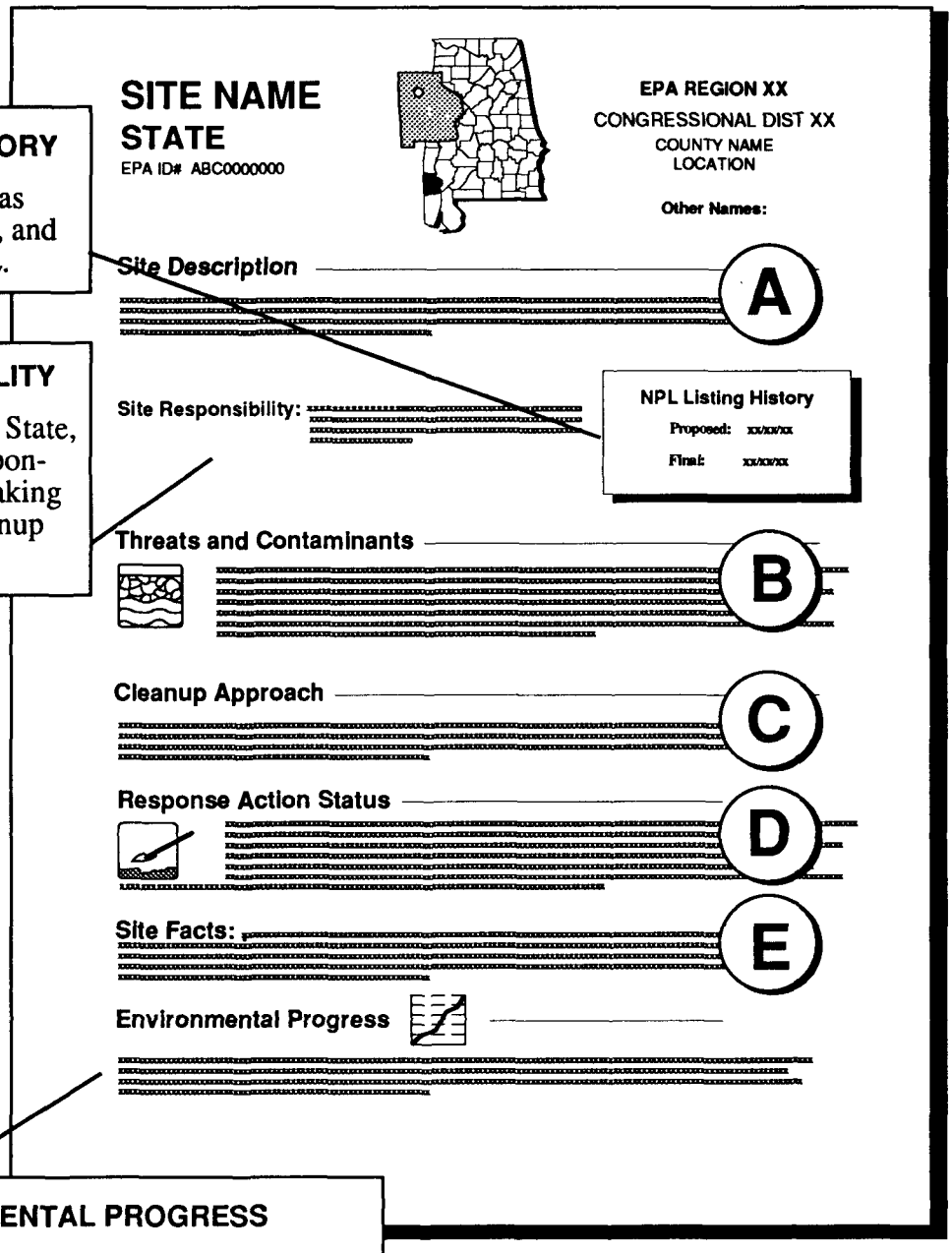
THE VOLUME

NPL LISTING HISTORY

Dates when the site was Proposed, made Final, and Deleted from the NPL.

SITE RESPONSIBILITY

Identifies the Federal, State, and/or potentially responsible parties that are taking responsibility for cleanup actions at the site.



ENVIRONMENTAL PROGRESS

A summary of the actions to reduce the threats to nearby residents and the surrounding environment; progress towards cleaning up the site and goals of the cleanup plan are given here.

A

SITE DESCRIPTION

This section describes the location and history of the site. It includes descriptions of the most recent activities and past actions at the site that have contributed to the contamination. Population estimates, land usages, and nearby resources give readers background on the local setting surrounding the site.

B

THREATS AND CONTAMINANTS

The major chemical categories of site contamination are noted, as well as which environmental resources are affected. Icons representing each of the affected resources (may include air, groundwater, surface water, soil, and contamination to environmentally sensitive areas) are included in the margins of this section. Potential threats to residents and the surrounding environments arising from the site contamination also are described.

C

CLEANUP APPROACH

This section contains a brief overview of how the site is being cleaned up.

D

RESPONSE ACTION STATUS

Specific actions that have been accomplished or will be undertaken to clean up the site are described here. Cleanup activities at NPL sites are divided into separate phases, depending on the complexity and required actions at the site. Two major types of cleanup activities often are described: initial, immediate, or emergency actions to quickly remove or reduce imminent threats to the community and surrounding areas; and long-term remedial phases directed at final cleanup at the site. Each stage of the cleanup strategy is presented in this section of the summary. Icons representing the stage of the cleanup process (initial actions, site investigations, EPA selection of the cleanup remedy, engineering design phase, cleanup activities underway, and completed cleanup) are located in the margin next to each activity description.

E

SITE FACTS

Additional information on activities and events at the site are included in this section. Often details on legal or administrative actions taken by the EPA to achieve site cleanup or other facts pertaining to community involvement with the site cleanup process are reported here.

THE VOLUME

The "icons," or symbols, accompanying the text allow the reader to see at a glance which environmental resources are affected and the status of cleanup activities at the site.

Icons in the Threats and Contaminants Section

Contaminated *Groundwater* resources in the Contaminated *Groundwater* in the vicinity or underlying the site. (Groundwater is often used as a drinking water source.)

Contaminated *Surface Water and Sediments* on or near the site. (These include lakes, ponds, streams, and rivers.)

Contaminated *Air* in the vicinity of the site. (Air pollution usually is periodic and involves contaminated dust particles or hazardous gas emissions.)

Contaminated *Soil and Sludges* on or near the site. (This contamination category may include bulk or other surface hazardous wastes found on the site.)

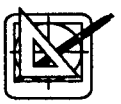
Threatened or contaminated *Environmentally Sensitive Areas* in the vicinity of the site. (Examples include wetlands and coastal areas or critical habitats.)

Icons in the Response Action Status Section

Initial Actions have been taken or are underway to eliminate immediate threats at the site.

Site Studies at the site to determine the nature and extent of contamination are planned or underway.

Remedy Selected indicates that site investigations have been concluded, and the EPA has selected a final cleanup remedy for the site or part of the site.

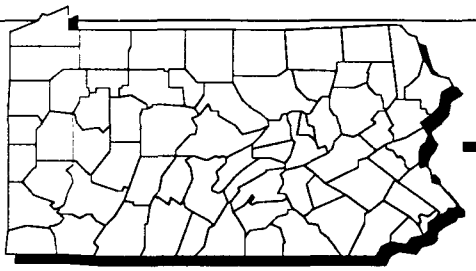


Remedy Design means that engineers are preparing specifications and drawings for the selected cleanup technologies.

Cleanup Ongoing indicates that the selected cleanup remedies for the contaminated site, or part of the site, currently are underway.

Cleanup Complete shows that all cleanup goals have been achieved for the contaminated site or part of the site.

Environmental Progress summarizes the activities taken to date to protect human health and to clean up site contamination.



The Commonwealth of Pennsylvania

The Commonwealth of Pennsylvania is located in EPA Region 3, which is comprised of five mid-atlantic states and the District of Columbia. The state covers 45,308 square miles and consists of the Piedmont and Coastal Plain in the southeastern corner, the Allegheny Mountains running from southwest to northweast, and the Lake Erie lowlands in the northwest. Ranked fifth in U.S, populations, according to the 1990 Census, Pennsylvania experienced a 1% increase in population betwen 1980 and 1990, and currently has approximately 11,882,000 residents. Principal state industries include steel, travel, health, apparel, machinery, food and agriculture, and the manufacture of primary metals, foods, fabricated metal products, non-electrical machinery and electrical machinery.

How Many NPL Sites Are in Pennsylvania?

Proposed	0
Final	95
Deleted	6
	101

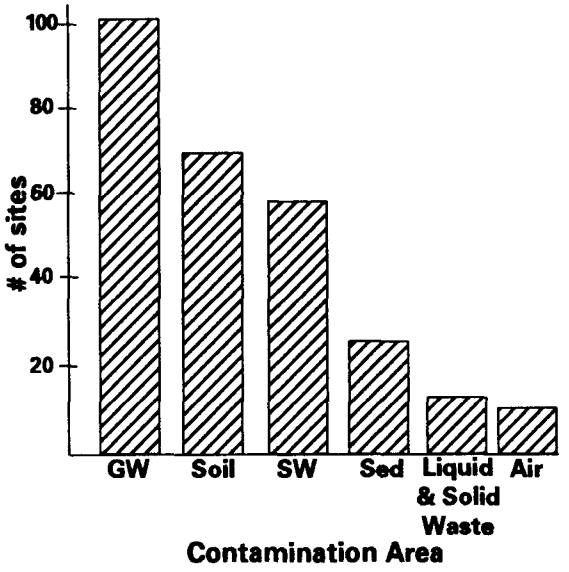
Where Are the NPL Sites Located?

Congressional Districts 1, 14, 17	1 site
Congressional District 3, 7, 20	2 sites
Congressional Districts 4, 23, 24	3 sites
Congressional District 9, 21	4 sites
Congressional District 11	5 sites
Congressional District 16	6 sites
Congressional Districts 8, 13, 15	7 sites
Congressional District 10, 19	9 sites
Congressional District 6	10 sites
Congressional District 5	15 sites

What Type of Sites Are on the NPL in Pennsylvania?

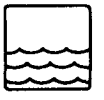
# of sites	type of sites
28	Municipal & Industrial Landfills
13	Disposal Facilities
9	Metals & Allied Products
8	Electronics & Electrical Equipment
7	Recyclers
5	Storage Facilities
4	Federal Facilities
18	Other Manufacturers (Electroplating, construction, rubber & plastics, chemicals & allied products, lumber & wood products, petroleum)
9	Other (Dry-cleaners, rail yard, natural gas well, automotive, spill, unspecified).

How Are Sites Contaminated and What Are the Principal* Chemicals?



Groundwater: Heavy metals (inorganics) and volatile organic compounds (VOCs).

Soil, Solid and Liquid Waste: Heavy metals (inorganics), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and creosotes (organics).

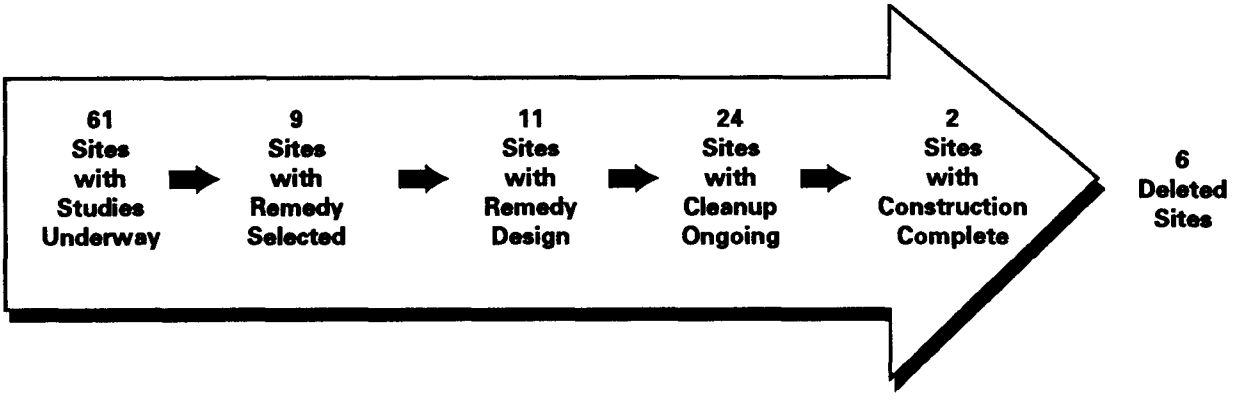


Surface Water and Sediments: Heavy metals (inorganics), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and creosotes (organics).

Air: Heavy metals (inorganics), volatile organic compounds (VOCs), and gases.

*Appear at 20% or more sites.

Where Are the Sites in the Superfund Cleanup Process?†



In addition to the activities described above, initial actions have been taken at 78 sites as interim cleanup measures.

†Cleanup status reflects phases of site activities rather than administrative accomplishments.

Progress To Date

The following Progress Report lists all sites currently on, or deleted from, the NPL and briefly summarizes the status of activities for each site at the time this report was prepared. The steps in the Superfund cleanup process are arrayed across the top of the chart, and each site's progress through these steps is represented by an arrow (⇨) indicating the current stage of cleanup.

Large and complex sites often are organized into several cleanup stages. For example, separate cleanup efforts may be required to address the source of the contamination, hazardous substances in the groundwater, and surface water pollution, or to clean up different areas of a large site. In such cases, the chart portrays cleanup progress at the site's *most advanced* stage, reflecting the status of site activities rather than administrative accomplishments.

- An arrow in the "Initial Response" category indicates that an emergency cleanup or initial action has been completed or currently is underway. Emergency or initial actions are taken as an interim measure to provide immediate relief from exposure to hazardous site conditions or to stabilize a site to prevent further contamination.

- A final arrow in the "Site Studies" category indicates that an investigation to determine the nature and extent of the contamination at the site currently is ongoing.

- A final arrow in the "Remedy Selection" category means that the EPA has selected the final cleanup strategy for the site. At the few sites where the EPA has determined that initial response actions have eliminated site contamination, or that any remaining contamination will be naturally dispersed without further cleanup activities, a "No Action" remedy is selected. In these cases, the arrows are discontinued at the "Remedy Selection" step and resume in the "Construction Complete" category.

- A final arrow at the "Remedial Design" stage indicates that engineers currently are designing the technical specifications for the selected cleanup remedies and technologies.

- A final arrow in the "Cleanup Ongoing" column means that final cleanup actions have been started at the site and currently are underway.

- A final arrow in the "Construction Complete" category is used only when all phases of the site cleanup plan have been performed, and the EPA has determined that no additional construction actions are required at the site. Some sites in this category currently may be undergoing long-term operation and maintenance or monitoring to ensure that the cleanup actions continue to protect human health and the environment.

- A check in the "Deleted" category indicates that the site cleanup has met all human health and environmental goals and that the EPA has deleted the site from the NPL.

Further information on the activities and progress at each site is given in the site "Fact Sheets" published in this volume.

Progress Toward Cleanup at NPL Sites in the State of Pennsylvania

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
27	A.I.W. FRANK/MID-COUNTY MUSTANG	CHESTER	Final	10/04/89		⇨					
29	ALADDIN PLATING	LACKAWANNA	Final	07/01/87	⇨	⇨	⇨	⇨	⇨		
31	AMBLER ASBESTOS PILES	MONTGOMERY	Final	06/01/86	⇨	⇨	⇨	⇨			
33	AMP, INC. (GLEN ROCK FACILITY)	YORK	Final	10/04/89	⇨	⇨					
35	AVCO LYCOMING (WILLIAMSPORT DIV.)	LYCOMING	Final	02/12/90	⇨	⇨					
37	BALLY GW CONTAMINATION	BERKS	Final	07/01/87	⇨	⇨	⇨				
39	BELL LANDFILL	BRADFORD	Final	10/04/89		⇨					
41	BENDIX FLIGHT SYSTEMS DIVISION	SUSQUEHANNA	Final	07/01/87	⇨	⇨	⇨	⇨			
43	BERKLEY PRODUCTS CO. DUMP	LANCASTER	Final	03/31/89		⇨					
45	BERKS LANDFILL	BERKS	Final	10/04/89	⇨	⇨					
47	BERKS SAND PIT	BERKS	Final	09/01/84	⇨	⇨	⇨	⇨	⇨		
49	BLOSENSKI LANDFILL	CHESTER	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
51	BOARHEAD FARMS	BUCKS	Final	03/31/89		⇨					
53	BRODHEAD CREEK	MONROE	Final	09/01/83	⇨	⇨	⇨				
55	BROWN'S BATTERY BREAKING	BERKS	Final	06/01/86	⇨	⇨	⇨	⇨			
57	BRUIN LAGOON	BUTLER	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
59	BUTLER MINE TUNNEL	LUZERNE	Final	07/01/87	⇨	⇨					
61	BUTZ LANDFILL	MONROE	Final	03/31/89	⇨	⇨	⇨	⇨			
63	C & D RECYCLING	LUZERNE	Final	07/01/87	⇨	⇨					
65	CENTRE COUNTY KEPONE	CENTRE	Final	09/01/83	⇨	⇨					
67	COMMODORE SEMICONDUCTOR	MONTGOMERY	Final	10/04/89	⇨	⇨					
69	CRAIG FARM DRUM	ARMSTRONG	Final	09/01/83		⇨	⇨	⇨			
71	CROYDON TCE	BUCKS	Final	06/01/86		⇨	⇨	⇨	⇨		
73	CRYOCHEM, INC.	BERKS	Final	10/04/89	⇨	⇨	⇨	⇨			

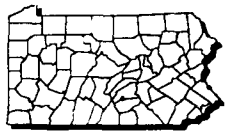
Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
75	DELTA QUARRIES/STOTLER LANDFILL	BLAIR	Final	03/31/89	⇨	⇨	⇨				
77	DORNEY ROAD LANDFILL	LEHIGH/BERKS	Final	09/01/84	⇨	⇨	⇨				
79	DOUGLASSVILLE DISPOSAL	BERKS	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
81	DRAKE CHEMICAL	CLINTON	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
83	DUBLIN TCE SITE	BUCKS	Final	08/30/90	⇨	⇨					
85	EAST MOUNT ZION	YORK	Final	09/01/84		⇨	⇨	⇨			
87	EASTERN DIVERSIFIED METALS	SCHUYLKILL	Final	10/04/89	⇨	⇨	⇨				
89	ELIZABETHTOWN LANDFILL	LANCASTER	Final	03/31/89		⇨					
91	ENTERPRISE AVE.	PHILADELPHIA	Deleted	03/07/86		⇨	⇨	⇨	⇨	⇨	✔
93	FISCHER AND PORTER COMPANY	BUCKS	Final	09/01/83				⇨	⇨		
95	HAVERTOWN PCP	DELAWARE	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
97	HEBELKA AUTO SALVAGE YARD	LEHIGH	Final	07/01/87		⇨	⇨	⇨			
99	HELEVA LANDFILL	LEHIGH	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
101	HELLERTOWN MANUFACTURING CO.	NORTHAMPTON	Final	03/31/89	⇨	⇨					
103	HENDERSON ROAD SITE	MONTGOMERY	Final	09/01/84		⇨	⇨	⇨	⇨		
105	HRANICA LANDFILL	BUTLER	Final	09/01/83	⇨	⇨	⇨				
107	HUNTERSTOWN ROAD	ADAMS	Final	06/01/86	⇨	⇨					
109	INDUSTRIAL LANE	NORTHAMPTON	Final	09/01/84		⇨	⇨	⇨	⇨		
111	JACKS CREEK/SITKIN SMELTING	MIFFLIN	Final	10/04/89	⇨	⇨					
113	KEYSTONE SANITATION LANDFILL	ADAMS	Final	07/01/87		⇨	⇨				
115	KIMBERTON SITE	CHESTER	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
117	LACKAWANNA REFUSE	LACKAWANNA	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
119	LANSDOWNE RADIATION SITE	DELAWARE	Final	09/01/85	⇨		⇨	⇨	⇨		
121	LEHIGH ELECTRIC & ENGINEERING CO.	LACKAWANNA	Deleted	03/07/86		⇨	⇨	⇨	⇨	⇨	✔
123	LETTERKENNY ARMY DEPOT (PDO)	FRANKLIN	Final	03/13/89	⇨	⇨					
125	LETTERKENNY ARMY DEPOT (S.E. AREA)	FRANKLIN	Final	07/01/87	⇨	⇨					
127	LINDANE DUMP	ALLEGHENY	Final	09/01/83	⇨	⇨					

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
129	LORD-SHOPE LANDFILL	ERIE	Final	09/01/83	⇨	⇨	⇨				
131	MALVERN TCE	CHESTER	Final	09/01/83	⇨	⇨					
133	MCADOO ASSOCIATES	SCHUYLKILL	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
135	METAL BANKS	PHILADELPHIA	Final	09/01/83	⇨	⇨					
137	MIDDLETOWN AIR FIELD	DAUPHIN	Final	06/01/86	⇨	⇨	⇨	⇨	⇨		
139	MILL CREEK DUMP	ERIE	Final	09/01/84	⇨	⇨	⇨	⇨	⇨		
141	MODERN SANITATION LANDFILL	ADAMS	Final	06/01/86	⇨	⇨					
143	MOYERS LANDFILL	MONTGOMERY	Final	09/01/83		⇨	⇨	⇨	⇨		
145	MW MANUFACTURING	MONTOUR	Final	06/01/86	⇨	⇨	⇨	⇨	⇨		
147	NAVAL AIR DEVELOPMENT CENTER	BUCKS	Final	10/04/89		⇨					
149	NORTH PENN AREA 1	MONTGOMERY	Final	03/31/89		⇨					
151	NORTH PENN AREA 2	MONTGOMERY	Final	10/04/89	⇨	⇨					
153	NORTH PENN AREA 5	MONTGOMERY	Final	03/31/89	⇨	⇨					
155	NORTH PENN AREA 6	MONTGOMERY	Final	03/31/89	⇨	⇨					
157	NORTH PENN AREA 7	MONTGOMERY	Final	03/31/89	⇨	⇨					
159	NORTH PENN AREA 12	MONTGOMERY	Final	02/21/90	⇨	⇨					
161	NOVAK SANITARY LANDFILL	LEHIGH	Final	10/04/89	⇨	⇨					
163	OCCIDENTAL CHEM/FIRESTONE	MONTGOMERY	Final	10/04/89		⇨					
165	OHIO RIVER PARK	ALLEGHENY	Final	08/30/90	⇨	⇨					
167	OLD CITY OF YORK LANDFILL	YORK	Final	09/01/83		⇨					
169	OSBORNE LANDFILL	MERCER	Final	09/01/83	⇨	⇨	⇨				
171	PALMERTON ZINC PILE	CARBON	Final	09/01/83	⇨	⇨	⇨	⇨			
173	PAOLI RAIL YARD	CHESTER	Final	08/30/90	⇨	⇨					
175	PRESQUE ISLE	ERIE	Deleted	02/13/88			⇨			⇨	✔
177	PUBLICKER INDUSTRIES, INC.	PHILADELPHIA	Final	10/04/89	⇨	⇨	⇨	⇨	⇨		

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
179	RAYMARK	MONTGOMERY	Final	10/04/89	⇨	⇨	⇨	⇨			
181	RECTICON/ALLIED STEEL CORP.	CHESTER	Final	10/04/89	⇨	⇨					
183	REESER'S LANDFILL	LEHIGH	Deleted	05/31/90		⇨	⇨			⇨	✔
185	RESIN DISPOSAL	ALLEGHENY	Final	09/01/83	⇨	⇨					
187	REVERE CHEMICAL CO.	BUCKS	Final	07/01/87	⇨	⇨					
189	RIVER ROAD LANDFILL	MERCER	Final	10/04/89	⇨	⇨					
191	ROUTE 940 DRUM DUMP	MONROE	Final	07/01/87	⇨	⇨					
193	SAEGERTOWN INDUSTRIAL AREA	CRAWFORD	Final	02/21/90		⇨					
195	SALFORD QUARRY	MONTGOMERY	Final	08/30/90	⇨	⇨					
197	SHRIVER'S CORNER	ADAMS	Final	06/01/86	⇨	⇨					
199	STANLEY KESSLER	MONTGOMERY	Final	09/01/83	⇨	⇨					
201	STRASBURG LANDFILL	CHESTER	Final	03/31/89	⇨	⇨	⇨	⇨	⇨		
203	TAYLOR BOROUGH DUMP	LACKAWANNA	Final	09/01/84	⇨	⇨	⇨	⇨	⇨	⇨	
205	TOBYHANNA ARMY DEPOT	MONROE	Final	08/30/90	⇨	⇨					
207	TONOLLI CORP.	CARBON	Final	10/04/89	⇨	⇨					
209	TYSONS DUMP	MONTGOMERY	Final	09/01/84	⇨	⇨	⇨	⇨	⇨		
211	VOORTMAN FARM	LEHIGH	Deleted	06/01/89	⇨	⇨	⇨			⇨	✔
213	WADE (ABM)	DELAWARE	Deleted	03/22/89	⇨	⇨	⇨		⇨	⇨	✔
215	WELSH LANDFILL	CHESTER	Final	09/01/84	⇨	⇨	⇨	⇨			
217	WESTINGHOUSE ELEC. CORP. (SHARON)	MERCER	Final	08/30/90	⇨	⇨					
219	WESTINGHOUSE ELEVATOR CO. PLANT	ADAMS	Final	06/01/86	⇨	⇨					
221	WESTLINE SITE	MCKEAN	Final	09/01/83	⇨	⇨	⇨	⇨	⇨	⇨	
223	WHITMOYER LABS, INC.	LEBANON	Final	06/01/86	⇨	⇨	⇨	⇨	⇨		
225	WILLIAM DICK LAGOONS	CHESTER	Final	07/01/87	⇨	⇨					
227	YORK COUNTY SOLID WASTE LANDFILL	YORK	Final	07/01/87	⇨	⇨					

Summary of Site Activities

EPA REGION 3



Who Do I Call with Questions?

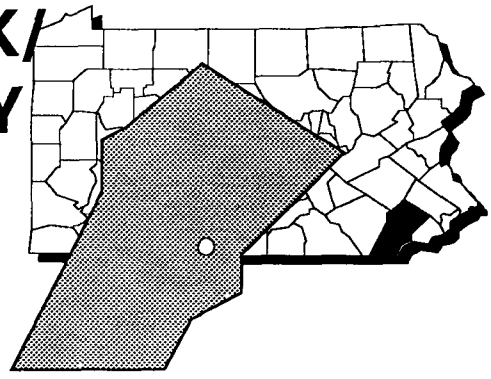
The following pages describe each NPL site in Pennsylvania, providing specific information on threats and contaminants, cleanup activities, and environmental progress. Should you have questions, please call the EPA's Region 3 Office in Philadelphia, Pennsylvania or one of the other offices listed below:

EPA Region 3 Superfund Community Relations Office	(215) 597-9905
EPA Region 3 Superfund Office	(215) 597-8132
EPA Superfund Hotline	(800) 424-9346
EPA Headquarters Public Information Center	(202) 260-2080
Pennsylvania Superfund Office	(717) 783-7816

A.I.W. FRANK/ MID-COUNTY MUSTANG

PENNSYLVANIA

EPA ID# PAD004351003



EPA REGION 3

CONGRESSIONAL DIST. 05

Chester County
Exton

Other Names:
Exton Area Sites

Site Description

The 16-acre A.I.W. Frank/Mid-County Mustang site was used from 1962 to 1981 to produce styrofoam cups and plates. In 1981, Continental Refrigerator Corp. acquired the property and manufactured refrigerators, freezers, and warming cabinets for the institutional and food service industry. One acre of the site was leased by Mid-County Mustang from 1982 until 1984. The space leased by Mid-County Mustang had been used since the 1940s for auto repair facilities and body shops. Solvents used for cleaning engines were discharged into floor drains in the building and from there into an on-site stone-bed drain field. Various contaminants have been detected in the floor drain, drain field, and soils. A well on the Mid-County Mustang property also was found to be contaminated. Approximately 76,700 people obtain drinking water from public and private wells within 3 miles of the site. More than 900 people live within a mile of the site. Valley Creek, located within 3 miles of the site, is used for recreational activities and is threatened by runoff from the site. The area, which was originally farmland, is undergoing rapid development to become a residential, commercial, and light industrial area.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 06/16/88

Final Date: 10/04/89

Threats and Contaminants

Volatile organic compounds (VOCs) were found in a well on the Mid-County Mustang property and at the floor drain and drain field in 1983. Surface water within 3 miles downstream is used for recreational activities and may be threatened by runoff flow into Valley Creek. The site is unfenced, making it possible for people and animals to come into direct contact with hazardous substances. People also could be exposed to chemicals by drinking contaminated groundwater.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: The EPA is assuming responsibility for conducting site investigations and cleanup. A work plan for the study to determine the nature and extent of site contamination and options for cleaning it up is under review, and field work is scheduled to begin in 1991.

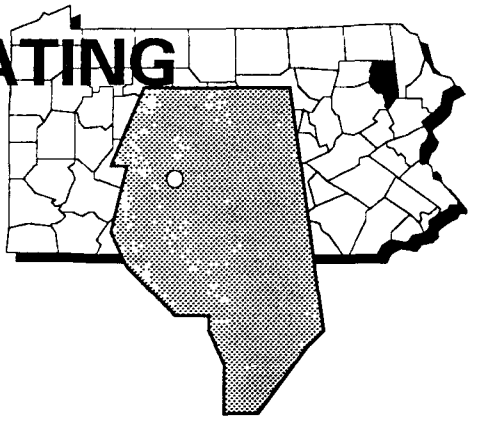
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were needed at the A.I.W. Frank/Mid-County Mustang site while studies are being conducted and cleanup activities are being planned.

ALADDIN PLATING

PENNSYLVANIA

EPA ID# PAD0675993378



EPA REGION 3

CONGRESSIONAL DIST. 10

Lackawana County
Scott Township

Other Names:
Aladdin Electroplating

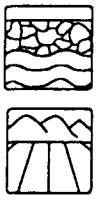
Site Description

The Aladdin Plating site covers 8 1/2 acres and was used as a small electroplating operation from 1947 to 1982, when it closed following a fire. The electroplating of nickel, copper, and chromium was the primary process during the company's operation. Sulfuric acid, chromic acid, and cyanide were used along with water for rinsing. Rinse water and sludge contaminated with electroplating materials were deposited in two unlined lagoons that had no diking or diversion ditches, permitting them to overflow. In the mid-1970s, the owner filled the lagoons with dirt. Vats containing process chemicals remained on site after a 1982 fire. Two surface water intakes along Leggetts Creek, the Griffin Creek intake, and Providence Reservoir intake, are approximately 1/2 mile and 2 miles, respectively, downstream of the site. The site is located in a residential community with about 120 people living within 1/4 mile of the site. An estimated 11,000 people obtain drinking water within 3 miles of the site. Four residences are located within 100 yards of the site.

Site Responsibility: The site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 07/01/87

Threats and Contaminants



Groundwater is contaminated with heavy metals from electroplating process wastes. Also, analyses conducted by the State in 1983 detected heavy metals including chromium, lead, and cyanide in the soil at several locations near the building and the two lagoons. Presence of groundwater contaminants potentially threaten local water supplies and those who drink the contaminated water. Direct contact with contaminated soil and inhalation of hazardous materials that enter the air pose potential threats to the health of people on or near the site.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focussing on soil and groundwater treatment.

Response Action Status

Immediate Actions: EPA emergency personnel stabilized the site by packing drums in new protective containers and emptying the vats. Two drums of cyanide were removed. The building was demolished and decontaminated. All decontaminated debris and vats were sent off site. Contaminated building debris was transported to an EPA-approved facility. Fencing was installed to secure the site. Monitoring wells were drilled, and the EPA performed residential well sampling and soil sampling.

Soil: Selected cleanup technologies for the soil include: (1) excavation and off-site stabilization of approximately 27,000 cubic yards of chromium-contaminated soil; (2) disposal of the treated soil in an off-site landfill; and (3) replacement of the excavated soil with clean fill. These actions began in 1988 and are expected to be completed in 1991.

Groundwater: The EPA is planning to conduct a site investigation starting in 1991 to determine the extent of groundwater contamination and to select cleanup technologies. Selection of the cleanup technique is planned for 1993 with groundwater cleanup actions scheduled to begin in 1994, following the completion of the remedy design.

Site Facts: The Pennsylvania Department of Environmental Protection (PADER) cited the parties potentially responsible for the site contamination for violating the Clean Streams Law in 1974. The PADER also cited the potentially responsible parties for treating industrial wastes without a permit. The public has expressed concern over the length of the cleanup process and the potential spread of contamination by groundwater runoff.

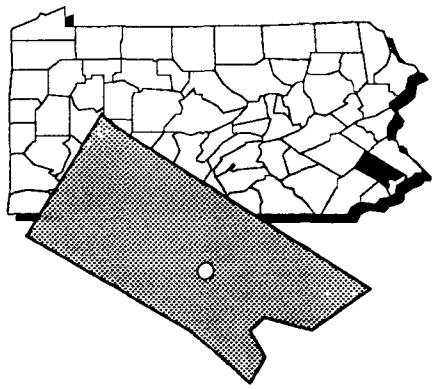
Environmental Progress

Overpacking drums, emptying vats, decontaminating and removing debris, removing contaminated soil, and fencing the site have significantly reduced the potential for exposure to contaminants at the Aladdin Plating site while further investigations and final cleanup activities are taking place.

AMBLER ASBESTOS PILES

PENNSYLVANIA

EPA ID# PAD000436436



EPA REGION 3

CONGRESSIONAL DIST. 13

Montgomery County
Borough of Ambler

Other Names:
Nicolet Corporation
CertainTeed Corporation

Site Description

The 15-acre Ambler Asbestos Piles site is made up of three asbestos waste piles in a residential area. The site was purchased in 1962 and divided by Nicolet Corporation and CertainTeed Corporation, both manufacturers of asbestos products. The previous owner, Keasbey & Mattison Company, also manufactured asbestos products and began dumping waste in 1867. Nicolet pumped wastewater containing asbestos from settling ponds into diked channel areas, creating wet asbestos piles that gradually dried as new diked areas. CertainTeed dumped broken wallboard and asbestos pipe products, which periodically were further broken by compacting tractors. The total volume of asbestos-contaminated waste in the piles is estimated to exceed 1 1/2 million cubic yards. In 1971 and 1972, Nicolet and CertainTeed applied for permits to continue the operation of their sites. The State denied the applications in 1974 and ordered both companies to stop dumping and to stabilize and cover the piles. The EPA found asbestos in the soil and on equipment in the Locust Street playground, which is beside the site. Approximately 6,000 people live within 1/2 mile of the site. The nearest residence is within 200 feet of one of the piles; about 40 residences are located within 1/4 mile. Wissahickon Creek and its flood plain border the site.

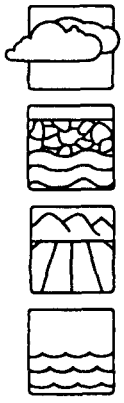
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



The air, groundwater, soil, sediments, and surface water are contaminated with asbestos. Asbestos found in the soil and on the equipment in the adjacent playground poses a threat through direct contact, inhalation, and accidental ingestion of fibers.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and asbestos cleanup.

Response Action Status

Immediate Actions: CertainTeed Corporation contained their asbestos pile with a vegetated soil cover in 1977. The Nicolet Corporation decontaminated the playground equipment and closed the playground in 1984. The site was partially fenced, and the asbestos piles were covered by the Nicolet Corporation and the EPA. The erosion gullies were repaired and reseeded and the problem drainage areas were regraded. These containment activities greatly reduced the short-term threats of asbestos migrating off site. Also, the EPA installed additional fencing in 1989 to restrict access to the site and to limit the potential for residents to come into contact with contaminated areas.

Entire Site: The remedies selected by the EPA for this phase of site cleanup include placing a special cover on each of the asbestos piles to prevent the release of fibers then placing clean soil in the existing lagoon and settling basins. In addition, water from the lagoon and the settling basins will be pumped out, filtered for asbestos, and discharged on site. The piles will be graded to allow proper drainage. Sediments from the lagoon will be covered with clean, compacted soil. Fencing, locking gates, and surface water management and erosion control measures will be installed around the site. Other measures will be taken to prevent the erosion of the asbestos pile where it adjoins the Wissahickon Creek and Stuart Farm Creek banks. The parties potentially responsible for the site contamination began these activities in 1991 and are scheduled to compete the design work in 1992.

Asbestos: Based on the investigation conducted by the parties potentially responsible for site contamination, the EPA selected a remedy in 1989. The remedy consists of: regrading the pile plateau; reinforcing the soil cover; installing erosion and sedimentation control devices; performing a verification study to determine the source of inorganics in Stuart Farm Creek; installing or upgrading the fencing/locking gates; posting warning signs; and air monitoring. The design work for this remedy began in 1990 and is expected to be completed in 1991.

Site Facts: In 1988, the EPA entered into a Consent Order with CertainTeed Company to conduct field sampling of one of the asbestos piles it owns. Also, the EPA settled with Nicolet Corporation for implementation of the site cleanup plan.

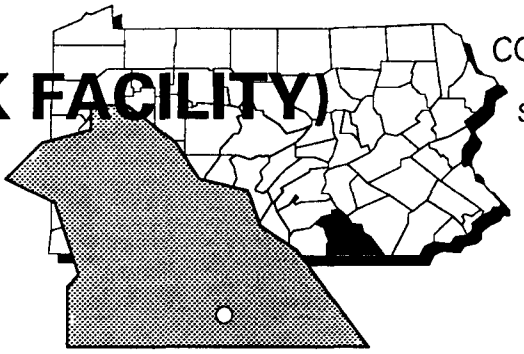
Environmental Progress

The immediate actions, including fencing the site, removing asbestos piles, decontaminating and closing the adjacent playground, and covering the contaminated soil with a vegetative soil cover have reduced the potential for exposure to asbestos from the Ambler Asbestos Piles site for nearby residents while final cleanup activities are designed.

AMP, INC. (GLEN ROCK FACILITY)

PENNSYLVANIA

EPA ID# PAD041421223



EPA REGION 3
CONGRESSIONAL DIST. 19
York County
Susquehanna Road in Glen Rock

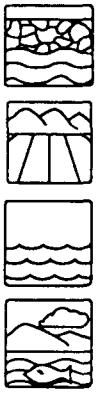
Site Description

The Amp, Inc. (Glen Rock Facility) is a 20-acre site located in a rural area outside of Glen Rock. The facility is the plastics division of Amp, Inc., which manufactures injection-molded plastics and polyester. The materials development lab uses contact adhesives and lubricants. The facility has a permit for managing hazardous wastes under the Resource Conservation and Recovery Act (RCRA). In 1984, employees' complaints about the taste of their water led to testing. Three wells located on the site were tested, and the owners were notified of the contamination. Well water serving an apartment complex also was tested, and the owner was notified of possible exposure to contaminants in the groundwater. Amp, Inc. is working to prevent contaminants from migrating off the property, and solvents are being removed from nearby wells. Approximately 4,700 people live within a 3-mile radius of the site. A trailer park and apartment complex are nearby. Larkin Pond, a wetland located next to the site, is used for recreational activities and drains into a tributary of Seaks Run.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants



Analysis of the groundwater, soil, and surface water from 1984 through 1990 revealed contamination with trichloroethane and trichloroethylene from manufacturing wastes. People who accidentally ingest or come into direct contact with contaminated groundwater, soil, or surface water may be at risk. The site is adjacent to a wetland, which could be subject to contamination from runoff from the site.

Cleanup Approach:

The site is being addresed in two stages: initial actions and single long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Initial Actions: Amp, Inc. currently is pumping and treating contaminated groundwater by utilizing six recovery wells and two air stripping towers to prevent the contaminants from migrating off site. The monitoring wells are analyzed quarterly. A third air stripping tower will be used to treat water as a backup drinking water source for the neighboring trailer park.

Entire Site: Amp, Inc. has completed a study, under the RCRA program, determining the nature and extent of contamination at the site and recommending alternatives for site cleanup. The EPA and Amp, Inc. have agreed on one corrective measure. Amp, Inc. will install a bedrock flushing infiltration trench to flush contaminants through the bedrock and into the groundwater pumping wells and air stripping towers. Cleanup is scheduled to begin in late 1991. A site study under the Superfund program will be undertaken after the cleanup action required by the RCRA program is completed.

Site Facts: In 1991, a RCRA order was issued to Amp, Inc. that formally obligated the company to take corrective measures with regard to the groundwater pump and treatment system.

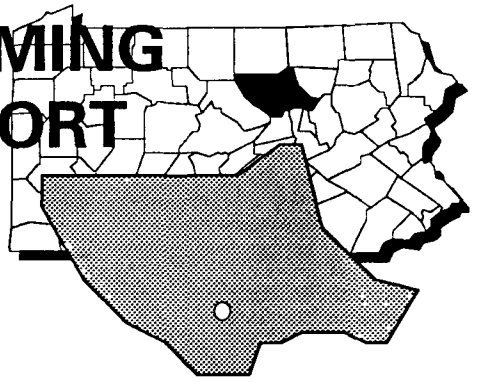
Environmental Progress

The pump and treat system currently in operation at the Amp, Inc. (Glen Rock Facility) site is restricting the spread of contamination and has greatly reduced the potential for exposure to hazardous materials while the selection of a cleanup remedy is being finalized. Active monitoring wells ensure that contamination continues to be localized in the site area while the final cleanup remedies are undertaken.

AVCO LYCOMING (WILLIAMSPORT DIVISION)

PENNSYLVANIA

EPA ID# PAD003053709



EPA REGION 3
CONGRESSIONAL DIST. 17
Lycoming County
Williamsport

Site Description

The 28-acre Avco Lycoming (Williamsport Division) site has produced aircraft engines for over 50 years. The plant operates a still to reclaim Varsol, a petroleum solvent, and has operated a waste treatment facility since the early 1950s. According to the State, past poor housekeeping practices apparently have contaminated the site. A municipal well field located 3,000 feet to the southwest of the site is used as a backup water supply under drought conditions. This water system is treated with air stripping. There are approximately 34,000 people living within 3 miles of the site. Private wells within 3 miles of the site serve 2,500 people. The site is located near pristine stream environments, including a trout stream.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 02/12/90

Threats and Contaminants

Monitoring wells on the site, off-site downgradient wells and a well field 3,000 feet southwest of the site are contaminated with trichloroethylene (TCE). The backup water supply system used in emergency situations is protected by air stripping treatment. People who accidentally ingest or come in direct contact with contaminated groundwater are at risk.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: Currently, groundwater on and off the site is being pumped and treated to remove contaminants.

Entire Site: Avco Lycoming, under EPA monitoring, has investigated the nature and extent of contamination at the site. This investigation defined the contaminants and recommended alternatives for the final cleanup. The proposed plan, issued in 1991, includes additional cleanup of groundwater on and off the site. A decision will be made later in 1991, after public review of the plan.

Site Facts: In 1985, the State and Avco signed a Consent Order involving monitoring of groundwater and cleanup of on-site groundwater.

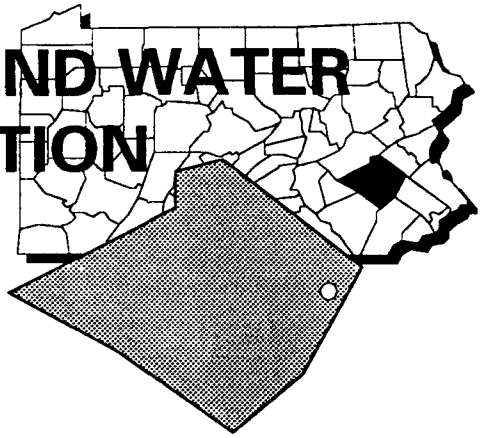
Environmental Progress

The pumping and treating of groundwater described above has reduced the potential for exposure to hazardous substances at the Avco Lycoming (Williamsport Division) site while investigations and studies are initiated.

BALLY GROUND WATER CONTAMINATION

PENNSYLVANIA

EPA ID# PAD061105128



EPA REGION 3
CONGRESSIONAL DIST. 06
Berks County
Bally

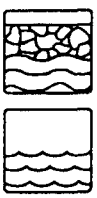
Site Description

The Bally Ground Water Contamination site consists of an area of groundwater contamination in and around the Bally Municipal Well #3. In 1982, the Pennsylvania Department of Environmental Resources discovered organic solvent contamination in this well; the well was taken out of service shortly thereafter. Presently, water is being pumped from the well and treated by an air stripping system to remove volatile organic chemicals (VOCs) before it is discharged to the municipal water supply system and into the West Branch of the Perkiomen Creek. The probable source of the contamination is thought to be a company that manufactures urethane-insulated panels for refrigerating units and is located approximately 1,000 feet from the well. The company used lagoons on its property to dispose of plant waste from at least 1960 to 1965. By 1966, the three lagoons were backfilled and used for vehicle parking. Approximately 6,400 people live within a 3-mile radius of the site. The closest residence is within 1/4 mile of the manufacturing facility. About 5,100 people depend on wells for drinking water.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 07/01/87

Threats and Contaminants



The groundwater is contaminated with various VOCs, as is the surface water and off-site groundwater. Potential health risks exist through direct contact with or drinking of contaminated groundwater or surface water. Currently, contamination levels in active public water supply wells do not pose any danger; however, private well contamination does pose a risk. Surface soil contamination that could pose a public health hazard has been either covered or is secured by a fence.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on groundwater treatment.

Response Action Status

Immediate Actions: Well #1 at the Bally well field has been taken out of service in an attempt to limit severe contamination to Well #3. An air stripping unit has been installed to treat the water supply provided by Well #3. The public water supply now meets acceptable EPA standards.

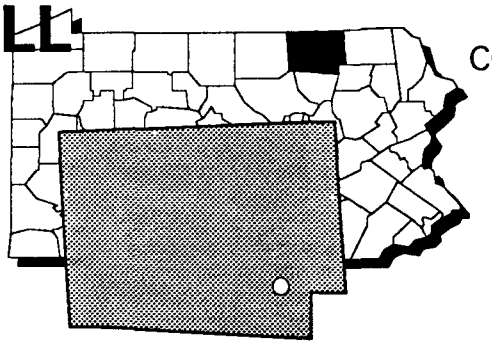
Groundwater: Bally Engineered Structures, Inc. completed a study of the extent of contamination and alternative technologies for cleanup in 1989. The remedy selected includes pumping and treating the groundwater using an air stripper. Design of the selected cleanup plan is expected to begin in 1991 and be completed in 1992, after which the selected cleanup activities will begin.

Site Facts: In 1987, the EPA entered into a Consent Order with Bally Engineered Structures, Inc., to conduct a study on the type and extent of contamination at the site.

Environmental Progress

By treating the public drinking water, nearby residents of the Bally Ground Water Contamination site are protected from hazardous chemicals while the potentially responsible parties plan cleanup activities.

BELL LANDFILL
PENNSYLVANIA
EPA ID# PAD980705107



EPA REGION 3
CONGRESSIONAL DIST. 10
Bradford County
Wyalusing

Other Names:
Terry Township Fill

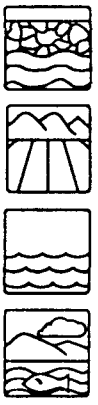
Site Description

Bell Landfill covers 33 acres in Terry Township. Prior to 1970, the privately owned and operated site served primarily as an open dump for municipal trash. In 1978, the State licensed the landfill to accept ferric hydroxide sludge in an asphalt-lined portion of the fill. From 1979 to 1981, 8,225 tons of sludge were disposed of at the site. After identifying numerous permit violations related to leachate collection and the material used to cover the filled material, the State closed the landfill in 1982. The former owner's estate had the disposal areas partially covered with soil and installed two leachate collection tanks. However, the EPA does not believe these actions were performed satisfactorily. In 1984, the EPA detected contaminants in a private well near the site. Approximately 800 people live within 3 miles of the site and use private wells for drinking water. About 100 people live within a mile of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants



The groundwater is contaminated with barium from the former disposal activities. Leachate is contaminated with high levels of organic pollutants, including aromatics, ketones, and phthalates and heavy metals including barium, cadmium, lead, and zinc. An on-site pond is contaminated with trichloroethylene (TCE) and heavy metals. Leachate has seeped from the landfill into an unnamed tributary of Sugar Run, which is used for recreation and is protected by the State for cold water fishing. Contaminants were found in an on-site pond used for watering farm animals. People who walk on the unfenced site and come into direct contact with or accidentally ingest contaminated groundwater, surface water, or leachate may be at risk.

Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: The party potentially responsible for contamination at the site is investigating the nature and extent of contamination under EPA monitoring. This investigation, which began in 1991 and is planned for completion in 1992, will recommend alternatives for the cleanup.

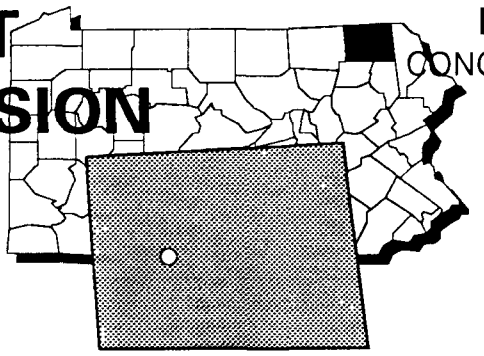
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that the Bell Landfill site does not pose an immediate threat to public health or the environment. Studies leading to the selection of a final cleanup remedy currently are taking place.

BENDIX FLIGHT SYSTEMS DIVISION

PENNSYLVANIA

EPA ID# PAD003047974



EPA REGION 3

CONGRESSIONAL DIST. 10

Susquehanna County
Bridgewater Township

Other Names:
Allied Corporation

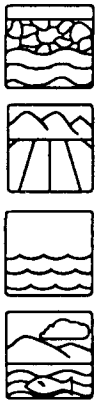
Site Description

The Bendix Flight Systems Division site encompasses 60 acres and is an active manufacturing facility for aircraft instruments. The Bendix Corporation bought the parcels that formed the site in 1951 and 1952. Bendix was purchased by Allied Corporation in 1983. From 1952 until 1958, industrial solvent wastes were disposed of in a lagoon to the northeast of the plant and also in a series of trenches east of the plant. In addition, from the 1950s to 1978, an earthen pit was used for the disposal of water-soluble cutting oil and oil-contaminated water from air compressors. Liquids were drained from the basin in 1978, and it was backfilled and seeded. Bendix conducted investigations from 1984 through 1987 that showed contamination of subsurface soils from past disposal practices. The contaminants have been leaching into the underlying groundwater. Five areas of contamination have been identified at the site: a trichloroethylene (TCE) storage tank area, the pit/trench area, an old landfill area, the area of a former solvent evaporation facility, and a former drum storage area behind the plant building. Approximately 1,400 people living within 3 miles of the site depend on water from private wells. An estimated 500 people live in the town of South Montrose. The town is dependent on the groundwater for its drinking water supply, and 19 residential wells have been found to be contaminated. Surface water runoff from the site flows into waste water treatment ponds that drain into a nearby wetland.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/85
Final Date: 07/01/87

Threats and Contaminants



Volatile organic compounds (VOCs) including vinyl chloride and carbon tetrachloride from former process wastes have been identified in the groundwater. Low levels of VOCs including benzene and toluene have also been detected in off-site private wells. VOCs, especially TCE and tetrachloroethene, have been identified in soils. Surface water also contains TCE, benzene, and chloroform. The groundwater can pose a threat to the health of people who come in direct contact with or consume it. The nearby wetlands are at risk from contaminated runoff from the site.

Cleanup Approach

The site is being addressed in two stages: initial actions and a single long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Initial Actions: Bendix has drained the freestanding liquid from the basin. Bendix also supplied carbon filters to affected well users and samples these on a quarterly basis. Contaminated groundwater is not being used as a source of drinking water.

Entire Site: The following remedies have been selected and are detailed in the EPA's 1988 final decision: vacuum extraction of contaminants from the soil and soil aeration, pumping and treatment of deep groundwater with carbon filtration, capture and collection of shallow groundwater by an interception trench, followed by treatment with carbon filtration and treatment of off-site groundwater through carbon adsorption. Design of the cleanup project began in 1990 and is scheduled to be completed in 1992.

Site Facts: The Pennsylvania Department of Environmental Resources and Bendix negotiated a Consent Order and Agreement to determine the nature and extent of contamination and to identify alternatives for cleanup. The EPA and Allied negotiated an additional Consent Decree, effective July 13, 1990, for design and construction of the remedy.

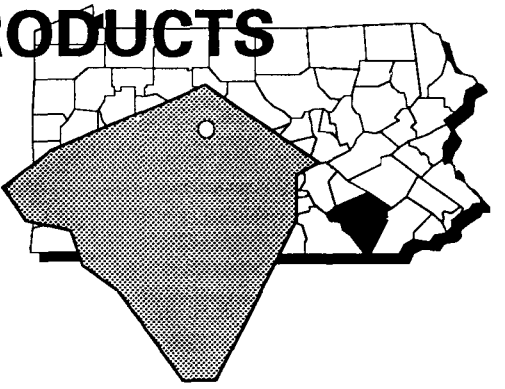
Environmental Progress

By providing and maintaining water filtration systems for affected residences, regularly sampling affected wells and removing the source of contamination at the site, the potential for exposure to contaminated drinking water has been removed while cleanup activities at the Bendix Flight Systems site are being designed and implemented.

BERKLEY PRODUCTS CO. DUMP

PENNSYLVANIA

EPA ID# PAD980538649



EPA REGION 3

CONGRESSIONAL DIST. 06

Lancaster County
Denver

Other Names:
Schoeneck Landfill

Site Description

From the 1930s until 1965, the 2-acre Berkley Products site accepted municipal wastes, which were burned or buried at the facility. The operation was privately owned. In 1965, Lipton Paint and Varnish Co., a subsidiary of Berkley Products Co., bought the site and used it to bury municipal waste mixed with organic solvents, paint wastes, resins, and pigment sludges. When operations ceased in 1970, the site was seeded and sold. The contamination affects the groundwater, a major drinking water supply. There are 25 homes bordering the site. Cocalico Creek, which is about 2 miles downstream of the site, serves an estimated 2,000 people. The community around the site is primarily rural.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 03/31/89

Threats and Contaminants

Heavy metals including barium, lead, and mercury, and plastic production wastes including phthalates have been found in groundwater, soils, and in leachates migrating off site. People may be at risk through direct contact with contaminated leachate seeps. Because the groundwater also is contaminated, drinking water could be affected.

Cleanup Approach

The site is being addressed through a single long-term remedial phase focusing on cleanup of the entire site.

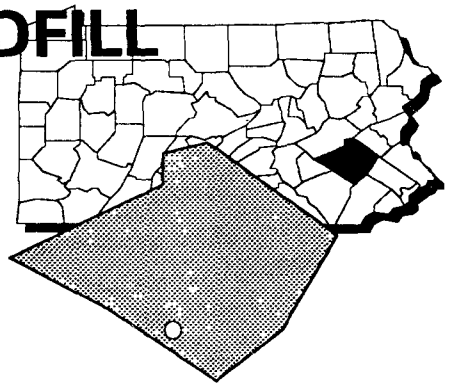
Response Action Status

Entire Site: When operations on the site stopped in 1970, the Berkley Products site was covered and seeded. These actions limited the potential for direct contact with wastes on the site. A study of the nature and extent of site contamination was started in 1990. The study is expected to be completed in 1991, at which time the EPA will select a final cleanup remedy.

Environmental Progress

By covering the site and seeding it with vegetative cover, the potential for exposure to hazardous materials has been reduced at the Berkley Products site while studies leading to final cleanup actions are ongoing.

BERKS LANDFILL
PENNSYLVANIA
EPA ID# PAD000651810



EPA REGION 3
CONGRESSIONAL DIST. 06
Berks County
Sinking Springs

Other Names:
Stabatrol Berks County Landfill

Site Description

The Berks Landfill consists of an eastern 43-acre, and a western 17-acre landfill, both of which are unlined. The Berks Landfill has been in operation since the 1950s. Starting in 1979, Stabatrol Corporation operated the western landfill, disposing of stabilized alkali sludges under a State permit. In 1975, the landfill was granted a permit to discharge treated leachate from its leachate collection system into an adjacent stream. Also in 1975, the eastern landfill was granted a solid waste permit to accept municipal refuse and demolition refuse. The State halted the discharges in 1979 because of violations of water quality standards. In 1980, the State suspended its approval for Stabatrol to stabilize sludges due to inadequate storage methods, ceasing all operations at the western landfill. A new owner acquired the site in 1984. A current leachate collection system discharges into three lined surface impoundments. A fourth unlined surface impoundment collects stormwater. The leachate and stormwater are pumped to the local wastewater treatment facility. In 1985, the EPA and the State discovered contamination of a private well and the monitoring wells on the site. About 23,500 residents use private and public wells within 3 miles of the site for drinking water.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs) including vinyl chloride and benzene, and with manganese, a heavy metal, according to sampling of an on-site monitoring well and a private well near the site. Lead has been identified in the leachate and in on-site soils. Before the site was fenced, contaminants in the lagoons posed a threat to site trespassers. Ingestion of contaminated groundwater poses a threat if wells become contaminated. A nearby stream may be threatened by contaminants; it formerly received leachate from the site.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: As an immediate action, the potentially responsible parties, under an EPA order, erected a fence around the eastern landfill, are constructing clay caps over several areas to prevent further contamination, and are installing a pumping and treatment system for the on-site lagoons. Leachate and rainwater collecting in the lagoons currently are being pumped into the sewer to prevent overflows. The clay cap and treatment system are scheduled for completion in 1991.

Entire Site: In 1986, the potentially responsible parties and the State conducted a preliminary site investigation, which identified VOC contamination in on-site groundwater. The EPA will investigate the nature and extent of the contamination at the site, and the study is scheduled to begin in 1991. The investigation also will recommend alternatives for cleanup. Once the site investigation has been completed, the EPA will evaluate the findings and recommendations to select the final cleanup remedies for the contamination at the Berks Landfill site.

Site Facts: The current site owner and the State entered into a Consent Order in 1986 to study the contamination of the groundwater and to close the landfill. In 1990, the EPA issued a Unilateral Order to 12 potentially responsible parties to conduct immediate actions at the site.

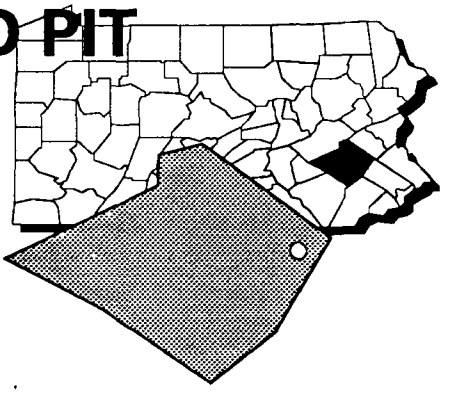
Environmental Progress

After listing the Berks Landfill site on the NPL, the EPA evaluated site conditions and determined that the selected immediate actions will eliminate the imminent threats to the public health or the environment. Meanwhile, investigations into the most effective cleanup methods are being conducted.

BERKS SAND PIT

PENNSYLVANIA

EPA ID# PAD980691794



EPA REGION 3

CONGRESSIONAL DIST. 06

Berks County

15 miles northeast of Reading, near the Village of Huffs Church

Other Names:
Van Elswyck Property

Site Description

The Berks Sand Pit site covers 4 acres in Longswamp Township. The privately owned sand pit was used for the disposal of refuse before it was filled in and regraded. The source of contamination has not yet been determined. Houses and private wells were constructed at the site in 1978. Nearby residential wells are contaminated and in 1983, the EPA installed an upgradient drinking water well as an alternate water source for residents. Longswamp Township has a population of approximately 4,600. There are approximately 30 single-family homes on or adjacent to the site. Perkiomen Creek tributaries are located to the east and west of the site.

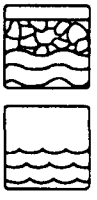
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Residential and monitoring wells drawing on the groundwater are contaminated with volatile organic compounds (VOCs). A tributary of Perkiomen Creek also is contaminated with VOCs. Area residents are at risk from drinking contaminated groundwater; however, an alternative water source provided to four residences has limited this exposure. Contaminated groundwater is discharging into the headwaters of the Middle Branch of Perkiomen Creek.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the groundwater.

Response Action Status

Immediate Actions: In 1983, the EPA installed a holding tank and water line to four residences. The homeowners are now maintaining the system. The EPA also excavated the waste disposal area and disposed of one drum of contaminated water. The area was filled in with clean soil.

Groundwater: The EPA plans to clean up the groundwater by extracting it and then treating it by air stripping. The contaminants removed by the air stream are further treated before releasing the air into the atmosphere. In 1990, the EPA began constructing the groundwater extraction wells. The wells are expected to be completed in 1991. Design of the water treatment plant was begun in 1990. The plant design is expected to be completed in 1991. The plume of contaminated groundwater has migrated past the residential area, but drinking water has remained within safe levels.

Site Facts: The State and the EPA signed a Cooperative Agreement to study the nature and extent of contamination at the site.

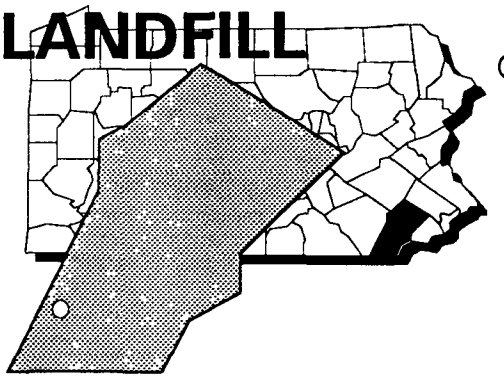
Environmental Progress

The EPA supplied an alternate drinking water supply to area residents and excavated and filled in the waste disposal area with clean soil, which eliminated the imminent threat posed by the contamination while final cleanup activities are underway at the Berks Sand Pit site.

BLOSENSKI LANDFILL

PENNSYLVANIA

EPA ID# PAD980539985



EPA REGION 3

CONGRESSIONAL DIST. 16

Chester County
West Caln Township

Site Description

The Blosenski Landfill, now inactive, covers approximately 8 acres of this 13 1/2-acre site in West Caln Township. It is bordered by heavily wooded and agricultural areas and new housing. The site operated as a landfill for the disposal of municipal and industrial wastes from the 1940s to the 1970s. Solvents, paints, leaking drums, and tank truck contents were dumped randomly into the unlined landfill. The landfill was ordered to cease operation by the Chester County Health Department in 1971. In response to citizen concerns, regulatory actions were taken against the facility. Approximately 30 residents live within 1/4 mile of the site, and about 470 residents live within a mile. Groundwater within a 3-mile radius of the site is used as a drinking water source by approximately 600 people.

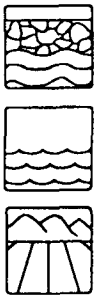
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater and surface water contain volatile organic compounds (VOCs) including benzene, vinyl chloride, and chloroform from former disposal practices. These compounds, as well as heavy metals such as mercury and arsenic, also were detected in monitoring and residential wells on and surrounding the site. VOCs, polyaromatic hydrocarbons (PAHs), and heavy metals have been detected in soils on site. VOCs and heavy metals have been detected in a tributary that receives runoff from the Blosenski Landfill. Potential risks may exist through direct contact with contaminated soils and through accidental ingestion of contaminated groundwater or soil. Recreational use of a tributary of Indian Spring Run, located approximately 500 feet north of the property, or of Indian Spring Run itself, may result in exposure to contaminants in surface water and sediments. The landfill also may pose a potential hazard because wastes with organic content may generate methane, which has the potential to explode if it accumulates in the landfill.

Cleanup Approach

The site is being addressed in two stages: initial actions and a single long-term remedial phase.

Response Action Status

Initial Actions: In 1982, 50 to 60 drums and a leaking tank truck were removed from the site by the EPA. A temporary alternate water supply was provided to two residences by the EPA, and a permanent alternate water supply servicing approximately 70 residents was completed in 1989.

Entire Site: The EPA will complete the cleanup of the site in the following four phases: (1) a permanent alternate water supply will be provided to approximately 75 residences; (2) approximately 800 buried drums, any materials within the drums, and freestanding liquids will be excavated and disposed of in an EPA-approved facility; (3) a pre-design study will be performed and will include further sampling of residential wells and surface water, the installation of additional monitoring wells, and, based on study results, pump testing for groundwater contaminants; and (4) installation of a cap on the landfill, construction of a surface water diversion system, and, if needed, construction of a gas venting system to protect the cover. Periodic monitoring of groundwater and soil also will take place. In 1990, the installation of the alternate water supply was completed, as was the design of the drum removal.

Site Facts: The U.S. Army Corps of Engineers has signed four Interagency Agreements with the EPA to address the public water supply and site cleanup. The landfill was ordered to cease operation by the Chester County Health Department in 1971. The public is concerned over who will have access to the water line and potential decreases in property value. In 1990, the EPA ordered the potentially responsible parties to conduct activities designed by the EPA to dispose of on-site drums.

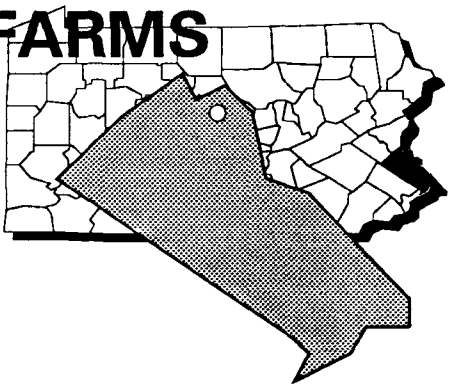
Environmental Progress

The provision of an emergency alternate drinking water source to the nearby residents and the removal of contaminated drums have reduced the potential for exposure to hazardous materials at the Blosenski Landfill site while it awaits further cleanup actions.

BOARHEAD FARMS

PENNSYLVANIA

EPA ID# PAD047726161



EPA REGION 3

CONGRESSIONAL DIST. 08

Bucks County

Bridgeton Township

Other Names:
Boarhead Corporation

Site Description

The 113-acre Boarhead Farms site has been operated by Keystone Excavation, a heavy equipment firm, since 1976. The site was used for horse breeding until 1970, when the Boarhead Corporation began using the property occasionally to repair equipment and store waste materials associated with its waste salvaging and hauling business. Little is known about the quantities and types of waste that may have been deposited on site; however, three documented releases have occurred on the property, attributed to broken valves on trucks that stopped for repairs or to discharges by the Boarhead Corporation. Discharges included 2,500 gallons of ferrous chloride in 1973, and 4,000 gallons of ammonia and 1,000 gallons of sulfuric acid in 1976. After the last spill, the State of Pennsylvania issued an injunction forbidding any chemicals to be brought onto the property. Approximately 6,000 people live within 3 miles of the site and obtain drinking water from public and private wells. Roughly 1/3 of the area is low-lying wetlands. The Delaware River, which is used for recreational activities, is 3 miles downstream of the site.

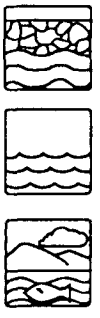
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 06/16/88

Final Date: 03/31/89

Threats and Contaminants



In 1984, the EPA detected volatile organic chemicals (VOCs) and heavy metals in wells and surface waters on the site thought to have been caused by the release of hazardous materials. Although only sporadic instances of contamination were found in residential wells, people in the area could be exposed to contaminants by drinking or coming into direct contact with contaminated groundwater or surface water on this partially unfenced site. On-site wetlands could be affected by contaminants from the groundwater and surface water.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: The EPA has begun a study to determine the extent of contamination at the site and to develop alternatives for site cleanup. As part of this study, a geophysical survey of the site was conducted in 1991. It revealed numerous magnetic anomalies underground, which may indicate the presence of buried drums. Therefore, test pits will be dug as part of the site studies. The study, expected to be completed in 1993, will result in the selection of the groundwater and surface water cleanup remedies as well as remedies for any additional contaminated resources identified during the investigation. Site studies were delayed while historic preservation issues were resolved.

Site Facts: In May 1989, the EPA sent Notice Letters to the parties potentially responsible for the site contamination, who elected not to perform a study on site contamination. The EPA is seeking additional information to identify other potentially responsible parties.

Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations at the Boarhead Farms site and determined that the site does not currently pose an imminent threat to public health or the environment while further studies are continued.

BRODHEAD CREEK
PENNSYLVANIA
EPA ID# PAD980691760

EPA REGION 3
CONGRESSIONAL DIST. 10
Monroe County
Stroudsburg

Other Names:
Union Gas

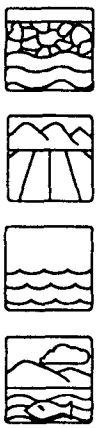
Site Description

The Brodhead Creek site covers 12 acres and is located near Brodhead and McMichael Creeks in Stroudsburg. A coal gasification plant that operated from 1888 to 1944 within the site area disposed of tar in two large unlined lagoons. The U.S. Army Corps of Engineers conducted a flood control project after a 1955 hurricane. Brodhead Creek was rechanneled, and a flood control level was constructed on site. In 1981, coal tar was found to be seeping into the creek, which is a heavily used trout fishing stream. Approximately 500 people live within a 1-mile radius of the site. The nearest residence to the site is less than 1/4 mile away. The main street of Stroudsburg is within 500 feet of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



Groundwater on site is contaminated with polycyclic aromatic hydrocarbons (PAHs), and toxic organic chemicals associated with coal tar have contaminated groundwater. On-site subsurface soil is contaminated with PAHs, arsenic, and coal tar constituents. Brodhead Creek sediments also are contaminated with chemicals associated with coal tar. Potential human health risks exist if contaminated groundwater is accidentally ingested and if direct contact is made with contaminants.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of free coal tar and soils and cleanup of the bedrock aquifer.

Response Action Status

Immediate Actions: In 1981, the EPA took steps to stop the seepage of contaminants including constructing filter fences and a dam, constructing an underground slurry wall to contain the wastes, and partial excavation of coal tar-contaminated soil. The current landowner pumped about 8,000 gallons of coal tar out of the ground and collected 150 drums of material. The owner and the State installed monitoring wells to determine the extent of groundwater contamination.

Free Coal Tar and Soils: The EPA made preliminary recommendations for cleanup alternatives to the Pennsylvania Power & Light Co., which include stabilization of the stream channel by backfilling, excavating the back channel area to eliminate coal tar, and pumping of coal tar from the major areas of contamination. In 1991, the EPA agreed to an interim action to clean up contaminated subsurface soils. The remedy involves innovative technology to recover coal tar and process water from extraction wells to be installed as part of the remedy. Reinjection wells also will be installed. Treated water will be discharged to Brodhead Creek and reinjected into the subsurface soils to enhance coal tar recovery. Recovered coal tar will be disposed of off site in a permitted incineration facility. Fencing and deed restrictions will be used to limit access during the cleanup and to limit future use of the site. The groundwater and Brodhead Creek will continue to be monitored to ensure that the remedy is effective.

Bedrock Aquifer: In 1991, the potentially responsible party is expected to begin a study to assess the nature and extent of contamination in the bedrock aquifer. The study is expected to be completed in 1993.

Site Facts: In 1983, the Government filed a complaint in the U.S. District Court for the Eastern District of Pennsylvania to recover costs incurred by the EPA and the Coast Guard in the response actions at the Brodhead Creek site. In 1987, Union Gas and the Pennsylvania Power & Light Co. signed a Consent Order with the Pennsylvania Department of Environmental Resources to perform an investigation to determine the extent of contamination and to develop alternative remedies for cleanup.

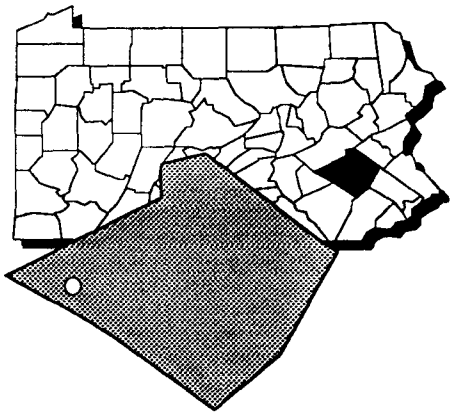
Environmental Progress

The construction of slurry walls to contain the spread of contamination, the pumping and removal of coal tar, and the removal of contaminated soil have added significantly to making the Brodhead Creek site safer while it awaits the implementation of further cleanup actions.

BROWN'S BATTERY BREAKING

PENNSYLVANIA

EPA ID# PAD980831812



EPA REGION 3
CONGRESSIONAL DIST. 06
Berks County
Tilden Township near the town of Shoemakersville

Site Description

The Brown's Battery Breaking site, covering 14 acres, is an abandoned battery recycling facility that was operated from 1961 to 1971. Three families were living on the site when the State discovered elevated levels of lead in children living in these residences. Additional investigations by the EPA found soil and surface water contamination. There is a fence around the primary disposal area; however, the remainder of the site is not restricted to public access. The landfill is bordered by Conrail tracks to the west, the Schuylkill River to the southeast, and Mill Creek to the southwest. It lies within the flood plain of the Schuylkill River. Approximately 220 people live within 1 mile of the site. There are 1,000 people within 3 miles of the site who depend on groundwater for drinking water supplies. Two private residential wells are located on site and are used as a drinking water source. The adjacent Schuylkill River is used as a potable water source, as well as for recreation.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants

The groundwater is contaminated with lead from former site operations. Nickel and zinc, as well as lead, have contaminated the soil. The surface water is contaminated with lead and nickel. The Schuylkill River is used for recreation and as a municipal water source and may become contaminated during periods of high rainfall or flooding. People who come in direct contact with or accidentally ingest contaminated surface water, groundwater, or soil may be at risk.

Cleanup Approach

This site is being addressed in two stages: emergency actions and two long-term remedial phases focusing on relocation of residents and cleanup of the entire site.

Response Action Status

Emergency Actions: In 1983, the EPA temporarily relocated three families during an extensive emergency action. Contaminated soil and battery casings were moved to a containment area and were covered with a low permeable cap. Also, the primary disposal area was fenced. In 1990, more residents were temporarily relocated. In 1991, a resident was moved permanently and all personal property was decontaminated under an interagency agreement with the U.S. Army Corps of Engineers.

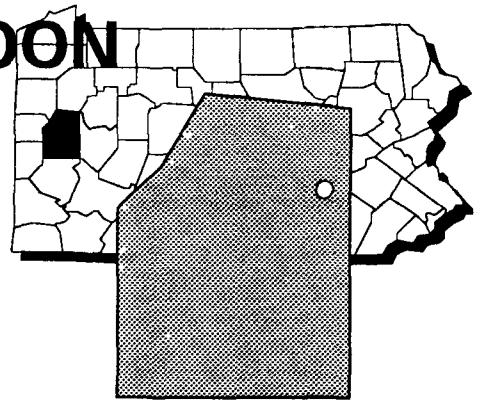
Residential Relocation: In 1990, the EPA decided to permanently relocate residents and a business, and began the process under its removal authority. The EPA is planning activities related to the remaining relocations, which are scheduled to begin in 1991 and be completed in 1992.

Entire Site: The EPA is conducting an investigation into the extent and nature of soil, debris, and groundwater contamination and to identify cleanup alternatives at the site. It is expected to be completed in 1991. When the investigation of site contamination is completed, design of cleanup remedies will begin, scheduled for 1993.

Environmental Progress

Emergency actions conducted by the EPA, including temporarily relocating affected families during cleanup activities, removing contaminated soil and battery casings, capping the containment area, and fencing the site, have eliminated imminent threats to the surroundings at the Brown's Battery Breaking site while further relocations and investigations are completed by the EPA.

BRUIN LAGOON
PENNSYLVANIA
EPA ID# PAD980712855



EPA REGION 3
CONGRESSIONAL DIST. 04
Butler County
South Branch of Bear
Creek Bruin Borough

Other Names:
AH-RS Coal Corporation

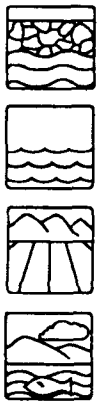
Site Description

Bruin Lagoon covers approximately 4 acres, consisting of a 1-acre open sludge lagoon contained by a 22-foot earthen dike, a 2-acre closed lagoon, an effluent pond, abandoned storage tanks and equipment, and an area of contaminated soil on adjacent private property caused by flooding in 1980. The site is an inactive impoundment and storage facility located on the site of a former petroleum refinery. For 40 years, the site was used to dispose of mineral oil production wastes and motor oil reclamation wastes. The oil refinery discharged its wastes into several lagoons. Approximately 35 people live in houses adjacent to the site. An estimated 700 people reside in the community.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants



The groundwater and surface water contain sulfuric acid, heavy metals, and hydrogen sulfide. The soil on an adjacent private property was contaminated with hydrogen sulfide and sulfuric acid in a 1980 flood. Direct contact with or accidental ingestion of contaminated soil, surface water, or drinking water poses a potential health risk. The first evidence of site contamination occurred when a large fish kill in the Allegheny River was reported in 1968. The site is located within a 100-year flood plain and subject to periodic flooding that may spread contaminants from the site.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on site stabilization and cleanup of the entire site.

Response Action Status

Immediate Actions: An investigation to determine the extent of contamination and the technologies available for cleanup was funded by the EPA in 1981. Freeboard was added to the lagoon, and the lagoon's overflow was diverted. The lagoon overflow was stabilized, and the open lagoon was closed. Cleanup work included the demolition and off-site disposal of abandoned storage tanks, disposal of PCB-contaminated residues, and excavation of contaminated surface soils. Discovery of hydrogen sulfide gas during the cleanup action required stopping all cleanup activities at the site to start an immediate emergency action. In 1984, site security and 24-hour communication with the fire chief was started; air monitoring and groundwater and surface water sampling were initiated; and 13 venting wells were installed. Well leads were covered, and the bank was stabilized. The work to date has stopped the migration of sludge below the grade of the lagoon with physical containment.

Site Stabilization: Cleanup work included the removal of the liquid floating on top of the open lagoon and disposing it off site, containing the remaining wastes on site, and stabilizing the lagoons and dikes. The EPA completed this phase of cleanup activities in 1984 and determined that a second investigation was needed to re-evaluate the site for additional sources of contamination.

Entire Site: The EPA completed a re-investigation of the site in 1986. Continuation of on-site stabilization of the site wastes, venting of trapped gases in covered areas, treatment of the shallow bedrock with a lime slurry wall, building a channel to prevent groundwater from entering the site, and capping of the stabilized sludge still is occurring. The dike stabilization also will be completed. The Army Corps of Engineers has begun construction activities, and cleanup is scheduled to be completed in 1991.

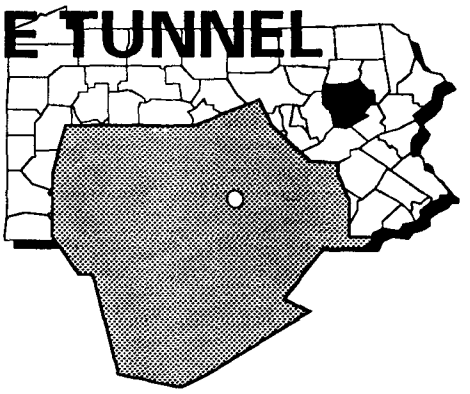
Environmental Progress

The numerous immediate actions to stabilize the lagoon, cover the site, and remove contaminated materials have greatly reduced the potential of exposure to hazardous materials and have controlled further spreading of contamination at the Bruin Lagoon site while the EPA completes final cleanup activities.

BUTLER MINE TUNNEL

PENNSYLVANIA

EPA ID# PAD980508451



EPA REGION 3
CONGRESSIONAL DIST. 11
Luzerne County
Pittston

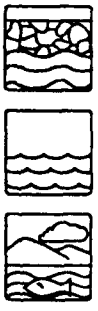
Site Description

The Butler Mine Tunnel site was constructed approximately 50 years ago as a collection and discharge point for acid mine drainage from an estimated 5-square-mile area of underground coal mines. Hazardous materials were disposed of in the tunnel, which discharges directly to the Susquehanna River. In 1979, an oily discharge coming from the tunnel created an oil slick, from bank to bank, on the river. The EPA tracked the contaminants from this initial discharge to a municipal water intake 60 miles downstream, which is the sole source of drinking water for approximately 11,700 residents of Danville. The oil contamination was then traced to the illegal dumping of hazardous chemicals into a 4-inch borehole located 3 1/2 miles from the outlet of the tunnel. The borehole was found to drain into the Butler Mine system. Approximately 25,000 people live within a 5-mile radius of the site, and approximately 1,400 people live within the boundaries of the Butler Mine Tunnel site. Also, a number of schools are located within a mile of the tunnel's discharge point.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 07/01/87

Threats and Contaminants



Preliminary on- and off-site groundwater (mine water) and surface water sampling results have identified contamination from semi-volatile organic compounds and petroleum hydrocarbons thought to have originated from the mine tunnel. Potential human risks exist if individuals ingest or come into direct contact with contaminated surface water and groundwater. Possible risks exist if individuals eat contaminated fish or livestock. The Susquehanna River is the area's source of drinking water and is a valuable ecological resource.

Cleanup Approach

The site is being addressed in two stages: emergency actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Emergency Actions: In 1979, in response to the Butler Mine discharge, EPA emergency personnel installed booms to collect the oily substances on the surface. The booms continued to operate until 1980, collecting a total of 160,000 gallons of oil, which contained approximately 13,000 pounds of VOCs. After the booms were removed, an automated detection system was installed at the tunnel and was operated by the State until 1984, during which time there was no evidence of any additional discharge from the tunnel. In 1985, approximately 100,000 gallons of waste oil were released at the Butler Mine Tunnel, following heavy rains associated with Hurricane Gloria. The EPA once again responded by installing booms on the river and collecting the contaminated oil. The existing monitoring boreholes again were sampled, and contaminated vegetation was removed.

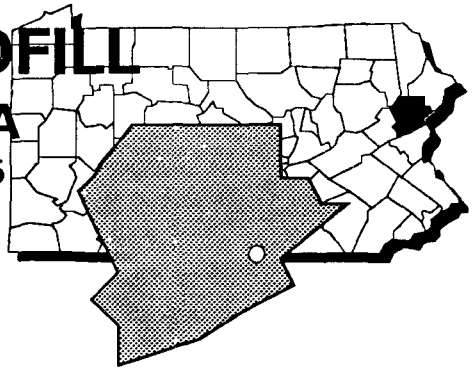
Entire Site: In 1987, the potentially responsible parties, under EPA monitoring, began an investigation to determine the extent of the contamination and to identify the alternative technologies available for cleanup. The investigation is scheduled to be completed in 1992.

Site Facts: The EPA and 17 potentially responsible parties entered into a Consent Order on March 30, 1987, under which the parties agreed to conduct a study of site contamination.

Environmental Progress

Due to emergency actions taken after discovery of the site contamination and again after Hurricane Gloria, the EPA has greatly reduced potential hazards at the Butler Mine Tunnel site while the potentially responsible parties, under EPA monitoring, complete investigations and start cleanup activities.

BUTZ LANDFILL
PENNSYLVANIA
EPA ID# PAD981034705



EPA REGION 3
CONGRESSIONAL DIST. 10
Monroe County
Township Route 601 (RD#5) in Stroudsburg

Other Names:
North Road Site

Site Description

The Butz Landfill site is a 13-acre, privately owned landfill in Stroudsburg that operated from 1963 to 1973. In 1973, the State denied the owner's application for a solid waste disposal permit. The owner/operator kept no records on the amount or types of wastes dumped at the site, although the permit application lists garbage, mixed solids, and septic sludge. Analyses in 1979 showed elevated levels of chromium and mercury in drinking water wells. In 1986, the State identified volatile organic compounds (VOCs) in the groundwater. A private well located 1,700 feet to the east of the site contained high levels of trichloroethylene (TCE). The EPA confirmed organic chemical contamination in more than 20 wells downgradient of the site in early 1987. Later that year, hydrogeologic studies proved the landfill to be the source of the solvents found in the groundwater. Surface runoff from the site appears to move toward the south. The surrounding area is rural and residential. Two large recreation areas lie within a mile of the site, and a childrens' camp is located within 1/2 mile. Surface water is used for recreational activities within 3 miles downstream of the landfill. Groundwater is the sole drinking source for area residents. An estimated 6,400 people draw drinking water from private wells within 3 miles of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 03/31/89

Threats and Contaminants

Groundwater underlying the site contains VOCs and heavy metals from solvents and other disposals at the site. Threats to the health of local residents include drinking, inhaling, or coming in direct contact with contaminated groundwater.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on cleanup of the groundwater and provision of an alternate water supply.

Response Action Status

Emergency Actions: In 1986, EPA emergency staff provided bottled water to 28 locations and installed carbon filter systems at 22 locations. Later that year, 17 groundwater monitoring wells were installed. In 1987, the EPA installed air strippers at two locations. The final design of the permanent water supply system is underway.

Groundwater: The EPA began an intensive study of groundwater contamination at the site in early 1990. Scheduled for completion in 1992, the investigation will explore the nature and extent of pollution and will recommend the best strategies for final cleanup.

Alternate Water Supply: In 1990, the Bureau of Reclamation began design activities to provide a new water line to homes with VOC-contaminated water. Implementation of the remedy is expected to begin in 1991 and be completed in 1992.

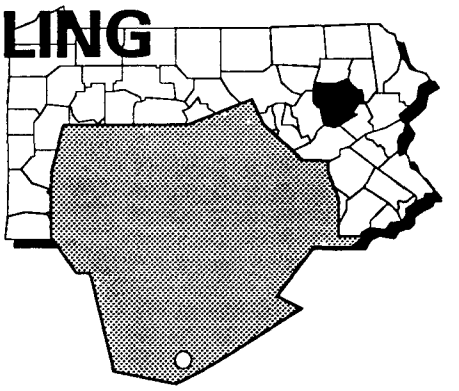
Environmental Progress

By supplying emergency drinking water to the neighboring residences and installing monitoring wells to measure contaminant levels, the EPA has reduced the potential of exposure to hazardous materials in the drinking supply while design of a new water supply and investigations leading to the selection of a permanent remedy are taking place at Butz Landfill.

C & D RECYCLING

PENNSYLVANIA

EPA ID# PAD021449244



EPA REGION 3
CONGRESSIONAL DIST. 11
Luzerne County
Foster Township

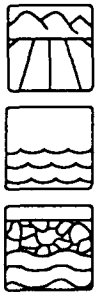
Site Description

The 45-acre C & D Recycling site operated as an incineration plant from the 1960s to early 1980s. The company incinerated lead- and plastic-cased telephone cables or burned them in pits to melt off the lead and reclaim the remaining copper wire. Plastic coverings mechanically were stripped prior to incineration and were stored on site in piles. According to tests conducted by the Pennsylvania Department of Environmental Resources (PADER), high concentrations of lead and copper are present in the ash piles, soil, burn pit, and drainage pathway areas on the site. Approximately 6,100 people within 3 miles of the site depend on public and private wells as their source of drinking water. Private wells are located within 1/2 mile of the site. Some of these wells have lead readings in excess of acceptable levels. The nearest well is within 1,000 feet of the site. Private residences and a trailer park with approximately 280 people are located within a 1-mile radius of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/85
Final Date: 07/01/87

Threats and Contaminants



Heavy metals including lead and copper have been found in on- and off-site soils, sediments, surface water and groundwater, but have not been linked to the site. Potential risks exist if people accidentally ingest or come in direct contact with contaminated soil, sediment, groundwater, or surface water.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1985, the potentially responsible parties excavated 68 tons of lead-containing material from the open burn pit areas, under the supervision of the PADER. In 1987, the parties constructed a fence and took measures to control soil erosion. The waste on site is now stabilized, and the site is secured.

Entire Site: The potentially responsible parties, under EPA monitoring, initiated an investigation to determine the extent of the contamination and to identify alternative technologies available for the cleanup. On-site monitoring wells were installed. The investigation and study is scheduled to be completed by 1991. The EPA will review the findings of the site study and will select a final cleanup remedy for site contamination. Preliminary findings of the study do not substantiate that heavy metal contamination has migrated from on-site soils to the groundwater and into residential wells. Leaching plumbing is being considered as a potential source of contamination for the residential wells.

Site Facts: The EPA negotiated two Consent Orders with the potentially responsible parties, one to conduct a study to determine the extent of contamination, and a second that enforced an immediate site response that restricted access to the site and limited the migration of contaminants off site.

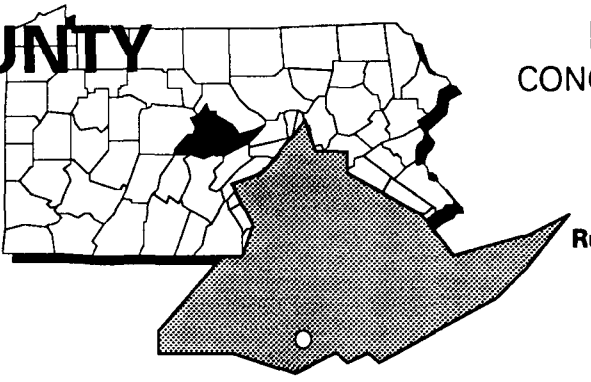
Environmental Progress

By constructing a fence, controlling soil erosion, and removing lead-containing materials, the potentially responsible parties at the C & D Recycling site have reduced the potential for accidental exposure to contamination while investigations leading to cleanup activities are completed.

CENTRE COUNTY KEPONE

PENNSYLVANIA

EPA ID# PAD000436261



EPA REGION 3

CONGRESSIONAL DIST. 23

Centre County

State College Borough

Other Names:
Ruetgers Nease Chemical Company
Nease Chemical

Site Description

The 32-acre Centre County Kepone site is an active chemical manufacturing plant that manufactured kepone in 1958, 1959, and 1963 and mirex in 1973 and 1974. Process wastes originally were disposed of on site in a spray irrigation field, a concrete lagoon, and two other earthen lagoons. Process wastes also were stored in drums on site. After the concrete lagoon was found to leak, the material in the lagoon was treated to harden it. The concrete then was disposed of in the two earthen lagoons and capped. However, the material failed to harden properly, and hazardous materials leached into the groundwater and surface water. Spring Creek is located adjacent to the site and has been placed off-limits for fishing as a result of high levels of kepone in fish. Approximately 2,100 people live within a 1-mile radius of the site. The closest residence is less than 1/4 mile from the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants

Various volatile organic compounds (VOCs) have been detected in on- and off-site groundwater and surface water. Polycyclic aromatic hydrocarbons (PAHs) have been detected in on-site sediments and soils, and petrochemicals have been detected in off-site drainage ditch sediment. Threats to human health include accidental ingestion of or direct contact with contaminated surface water, soil, groundwater, and sediment or eating contaminated fish.

Cleanup Approach

This site is being addressed in two stages: initial actions and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: In 1982, the parties potentially responsible for site contamination excavated and removed the contaminated material from the lagoons, removed the drums, excavated the topsoil of the drum storage area, and disposed of the waste material in a landfill. The parties also started a groundwater treatment program.

Entire Site: The potentially responsible parties, under EPA supervision, initiated a study in 1989 to determine the type and extent of contamination at the site and to identify alternative technologies to clean up the site. Once the study is completed, the EPA will evaluate the results of the investigation and select the final technology and cleanup activities for the site. Field work began in 1990. The study is expected to be completed in 1992.

Site Facts: Ruetgers-Nease, a potentially responsible party, signed a Consent Order to study the site contamination.

Environmental Progress

The removal and disposal of waste materials described above has eliminated imminent threats at the Centre County Kepone site, and the groundwater treatment program has reduced the threat of more widespread groundwater contamination while further studies are evaluated and cleanup activities are started.

COMMODORE SEMICONDUCTOR GROUP

PENNSYLVANIA

EPA ID# PAD093730174

EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County

Norristown

Other Names:
Commodore Business Machines

Site Description

The 10-acre Commodore Semiconductor Group site is an active computer chip manufacturing facility. Waste solvents were stored in an underground concrete storage tank on site until 1974, when it was taken out of service. A second steel tank was installed in 1974, and a leak occurred in 1979. Inspections conducted by the Pennsylvania Department of Environmental Resources indicated that both tanks have leaked. Approximately 15,900 people live within a 3-mile radius of the site and an Audubon Nature Reserve is located 2 miles from the site. Two public water supply wells, which served 6,300 people, were taken out of service in 1979 due to contamination. Within 3 miles of the site, approximately 800,000 people draw drinking water from wells in the contaminated aquifer.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 10/04/89

Threats and Contaminants

On- and off-site groundwater is contaminated with high levels of trichloroethylene (TCE) and other volatile organic compounds (VOCs) from the waste solvents that leaked from the underground storage tanks. TCE was also found in on-site soils. Accidental ingestion, direct contact, or inhalation of contaminated soils or groundwater on the site may pose health risks.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: Commodore excavated soils and pumped water from a contaminated well, then sprayed it onto surrounding fields. The volatile solvents dissipated into the air. Since 1984, an air stripper has been in use to remove solvents from the groundwater. Two public water supply wells were taken out of service. Presently, air strippers have been installed on all affected public wells through agreements between Commodore and the local water authority.

Entire Site: Under EPA monitoring, the parties potentially responsible for the site contamination are conducting a study to determine the extent of contamination at the site and to identify alternative technologies available for the site cleanup. The results of the study are expected in 1991, at which time the EPA will select the cleanup remedies for the site.

Site Facts: An Administrative Order on Consent was signed in June 1988, in which Commodore agreed to study the extent of contamination and to identify alternative technologies for the cleanup.

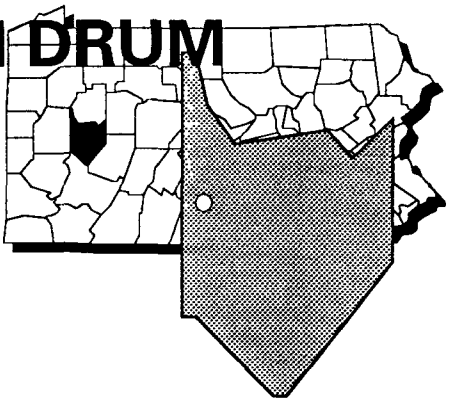
Environmental Progress

The numerous immediate actions performed by the potentially responsible parties, including excavating contaminated soil and treating contaminated water from wells, have made the Commodore Semiconductor Group site safer while investigations take place.

CRAIG FARM DRUM

PENNSYLVANIA

EPA ID# PAD980508527



EPA REGION 3

CONGRESSIONAL DIST. 04

Armstrong County

Parker

Other Names:
Craig Lagoon
Craig Farm Disposal Site

Site Description

The Craig Farm Drum site combines several areas that total 8 to 10 acres. The site originally contained two abandoned strip mine pits. Between 1958 and 1963, at least 2,500 tons of drummed waste material were deposited uncovered at the site and later were covered with dirt. Runoff from the site flows into an unnamed tributary to Valley Run Creek, which then drains into the Allegheny River 2 1/2 miles downstream. Approximately 1,700 people reside within a 3-mile radius of the site, with the closest residence less than a mile away. These residents obtain water from private and public wells.

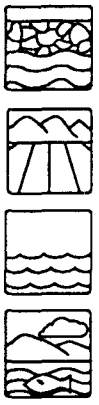
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater and soil are contaminated with creosotes and volatile organic compounds (VOCs). Also, a stream draining from the site and flowing to the Allegheny River shows signs of contamination from the wastes deposited. Possible health threats include direct contact with the contaminated surface water and accidental ingestion of contaminated groundwater. There is evidence that local residents use the site for hunting. The site threatens wetlands downgradient of the disposal pits.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

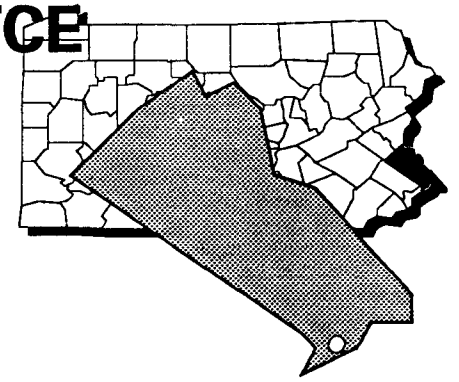
Entire Site: In 1986, the parties potentially responsible for the site contamination performed surface water sampling and groundwater sampling. Soil sampling also was performed in 1987. Five additional wells were drilled in 1988 to determine the full extent of contamination. A study that determined the remedies for site cleanup was completed in 1989. Remedies selected include the solidification of the contaminated source materials and any contaminated soil and removal of the contaminants to an on-site landfill. The contaminated groundwater will be treated off site. As part of pre-design work, the potentially responsible parties have agreed to sample all of the wells to determine if further groundwater cleanup is necessary. An engineering design of the selected remedies is scheduled to be completed in 1992.

Site Facts: The potentially responsible parties conducted an environmental assessment of the site in 1983 as a result of negotiations with the Pennsylvania Department of Environmental Resources (PADER). Koppers Company, Inc., one of the potentially responsible parties, signed a Consent Order with the PADER on February 10, 1987. In 1989, Beazer Materials and Services, which acquired Koppers Company, Inc. and also is potentially responsible for contamination at the site, made a good faith offer to the EPA to conduct the cleanup design and perform the cleanup. A Consent Decree for the cleanup work was signed by Beazer Materials and Services in May 1990, and was officially lodged in August 1990.

Environmental Progress

The EPA has determined that contamination at the site does not pose an imminent threat to nearby residents or the environment. The investigations at the Craig Farm Drum site have been completed and groundwater, soil, and surface water cleanup is expected to commence soon.

CROYDON TCE
PENNSYLVANIA
EPA ID# PAD981035009



EPA REGION 3
CONGRESSIONAL DIST. 08
Bucks County
Between Croydon and Bristol

Other Names:
Croydon TCE Spill

Site Description

The Croydon TCE (trichloroethylene) site is a 4-square-mile residential area that also includes a small industrial complex and numerous small businesses. The EPA identified the Croydon TCE site in 1985 after a Superfund investigation at the neighboring Rohm & Haas plant revealed a plume of groundwater contamination that did not appear to be associated with that site. Approximately 18,000 people living within 3 miles of the site depend on water from the Delaware River for their drinking water. About 200 people depend on shallow private wells within 3 miles of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 09/01/85
Final Date: 06/01/86

Threats and Contaminants

Volatile organic compounds (VOCs) thought to have originated from the TCE spill were detected in the groundwater. In addition, TCE and other VOCs were detected in eight residential wells. Low concentrations of polychlorinated biphenyls (PCBs) were detected in off-site soil. Contaminants were detected in Hog Run Creek, a tributary of the Delaware River that is used for recreational purposes. Potential risks may exist if fish and waterfowl from the contaminated creek are eaten. Individuals may be at risk from direct contact with contaminated materials, drinking contaminated groundwater or surface water, or accidentally ingesting contaminated soils.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on provision of a water supply line and cleanup of TCE contamination.

Response Action Status

Water Supply Line: Ten neighboring residences and a commercial establishment with contaminated wells were connected to a public service water line between December 1989 and February 1990.

TCE Contamination: Based on the results of an investigation of the site, preliminary alternatives selected by the EPA in 1989 for the site cleanup include containing the contamination on site or pumping and treating the contaminated groundwater via air stripping. Design of the cleanup actions is underway and is expected to be completed in 1991. The EPA plans to conduct long-term monitoring of residential and monitoring wells. Cleanup activities are scheduled to begin in 1991 and are expected to be completed in 1993.

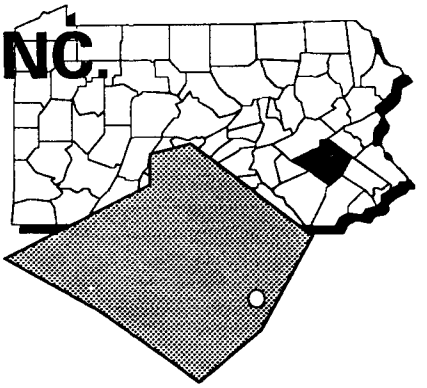
Environmental Progress

By connecting threatened neighboring residences and commercial establishments to a public service water line, the EPA has eliminated the possible exposure to contaminated water while final design and cleanup activities are completed at the Croydon TCE site.

CRYOCHEM, INC.

PENNSYLVANIA

EPA ID# PAD002360444



EPA REGION 3
CONGRESSIONAL DIST. 05
Berks County
Worman

Site Description

The 19-acre CryoChem, Inc. site has operated as a metals fabrication facility since 1962. The facility is composed of several production and storage buildings and an office complex located in the lower part of the property. The company uses solvents to clean finished metal parts, and any excess solvent is collected in shop drains. Prior to 1982, an organic solvent was used to remove a dye that was applied to welded connections to check for weld integrity. Excess solvent was placed in the shop drain system, which discharged into nearby surface waters that lead to Manatawny Creek. There are several residences within 1/4 mile of the site. The population within a 3-mile radius is approximately 1,100 and is solely dependent on groundwater as a drinking water supply. A series of environmental samples collected between 1981 and 1985 found organic chemicals in an on-site production well and in nearby residential wells.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 10/04/89

Threats and Contaminants

Groundwater on and off site and soils are contaminated with various volatile organic compounds (VOCs) from former solvent disposal practices. VOCs also were detected in waters that lead to Manatawny Creek and a tributary to Ironstone Creek. Exposure to contaminated groundwater, surface water, and sediments through direct contact or accidental ingestion poses potential risks to individuals. Residential wells are contaminated and threaten drinking water. A barrier to vehicular access provides the only restriction of the public's access to the site.

Cleanup Approach

This site is being addressed in three stages: immediate actions and three long-term remedial phases focusing on provision of a water supply system and cleanup of the groundwater and soil.

Response Action Status

Immediate Actions: The EPA sampled water in residential wells near the site in 1987. As a result of the findings, 19 carbon units were installed at homes with wells exceeding acceptable drinking water standards. Some residents have opted to buy bottled water or filtered tap water at their own expense. As of 1991, 20 residences use carbon filtration systems.

Water Supply: The potentially responsible parties, under EPA monitoring, started an investigation in 1988 to determine the extent of the contamination and to identify alternative cleanup technologies. Design of the new water supply system began in 1990, and is scheduled to be completed in 1991.

Groundwater: Under EPA oversight, the investigations conducted by the potentially responsible parties identified site cleanup alternatives. The EPA selected a remedy, which involves pumping and treating groundwater by air stripping and surface discharge. Design of the technical specifications for this system began in 1990 and are scheduled to be completed in late 1991.

Soil: Solvent discarded behind the fabrication building also may have contributed to groundwater contamination at the site. A study to explore technologies for addressing soil contamination was completed in mid-1991. The EPA is expected to select a remedy in late 1991.

Site Facts: The Pennsylvania Department of Environmental Resources (PADER) initiated sampling of residential wells in 1981 as a result of complaints from residents. The PADER found VOCs in the wells and recommended that the company discontinue the use of trichloroethane (TCA), clean out the drain system, and properly dispose of all contaminated materials. The company complied with the recommendations.

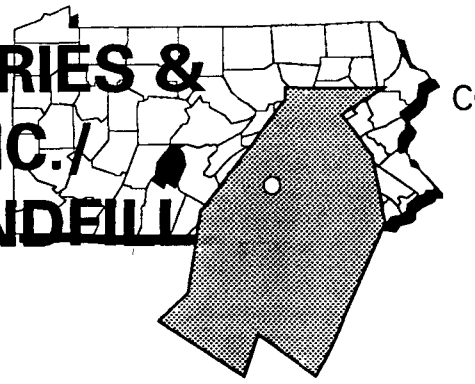
Environmental Progress

The water filtration units installed at nearby residences have eliminated the possibility of using contaminated water in area homes, while cleanup activities and the installation of a primary water supply line are proceeding at the CryoChem, Inc. site.

DELTA QUARRIES & DISPOSAL, INC./ STOTLER LANDFILL

PENNSYLVANIA

EPA ID# PAD981038052



EPA REGION 3
CONGRESSIONAL DIST. 09
Blair County
Antis and Logan Townships

Other Names:
Stotler Landfill
Parshall-Kruise Landfill

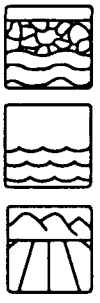
Site Description

The 40-acre Delta Quarries & Disposal, Inc./Stotler Landfill site is an inactive, unlicensed municipal waste facility that operated from the 1960s until 1985. Originally, the site consisted of two separate landfills that were combined with the Delta-Altoona Sanitary Landfill to form one large facility. Approximately 2,500 people live within 3 miles of the site. The closest residence is 35 feet from the site, and there are private wells in the vicinity. The aquifer under the site is used as a water source by local municipalities. About 1,500 people obtain drinking water from wells within 3 miles of the site. Groundwater flows in the direction of the Little Juniata River, which is 1 mile from the site and is used for recreational activities.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 03/31/89

Threats and Contaminants



The groundwater and surface water are contaminated with various volatile organic compounds (VOCs) that leached from the landfill areas. Threats to human health may include accidental ingestion, direct contact, and absorption of contaminated surface water and groundwater. Although there is unrestricted public access to the site, it is covered with 4 feet of soil, and a vegetative cover has been established over the landfill areas.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: The parties potentially responsible for the site contamination agreed to cover the landfill with soil and to take sedimentation and erosion control measures to limit the further spread of contaminants. This work was completed in 1987.

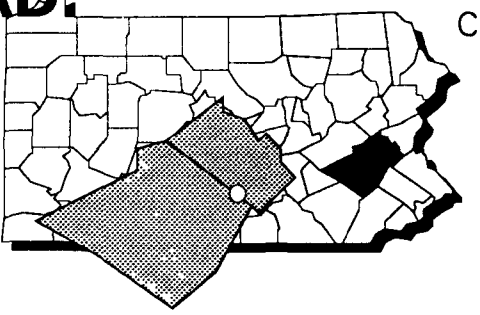
Entire Site: Based on investigations performed by the parties potentially responsible for contamination of the site, the EPA selected a groundwater and surface water remedy. The remedy consists of pumping and treating groundwater to address contamination. Deed and access restrictions will be implemented along with cap maintenance, gas venting, and continued monitoring of the surface and groundwater. Cleanup design work is scheduled to begin in 1992.

Site Facts: In 1984, the potentially responsible parties and the State entered into a Consent Order and Agreement to close the site. In 1987, the EPA and the potentially responsible parties executed an additional Consent Order for a study of site contamination and to identify alternatives for cleanup. The study was completed in 1991.

Environmental Progress

By covering the landfill with soil and taking sedimentation and erosion control measures, the potentially responsible parties at the Delta/Stotler site have limited the potential for direct exposure and the further spread of contamination. These actions have made the site safer while it awaits completion of design work and final cleanup activities.

DORNEY ROAD LANDFILL
PENNSYLVANIA
EPA ID# PAD980508832



EPA REGION 3
CONGRESSIONAL DIST. 06
Lehigh and Berks Counties
8 miles southwest of Allentown

Other Names:
Oswald's Landfill

Site Description

The Dorney Road Landfill site was an open-pit iron mine before it became a landfill in 1952. The site is located in Upper Macungie Township, a small portion of the site extends into Longswamp Township in Berks County. From 1952 to 1978, the site was used to dispose of municipal and industrial wastes. Twenty-four acres of the site, including the iron ore pit, were landfilled through 1978. The State inspected the site in 1970 and discovered that industrial sludge, batteries, and barrels of petroleum products were disposed of on site. The major portion of the landfill is surrounded by a soil berm. The site is surrounded by rural residences and farmland. The cultivated farmland near the site primarily is used to grow feed for cattle. Soybeans and wheat are grown for human consumption. The Allentown Formation underlies the site and is the primary source of water for local residents and the farm animals in the area. Groundwater contamination has migrated off site, and possibly into a residential well to the southeast of the site. There are approximately 20 people within a 1/4-mile radius of the site. The nearest resident lives 1,000 feet away from the site. Deer, waterfowl, and pheasant hunting occur seasonally in the area surrounding the site and have been observed on the site premises.

Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants

The groundwater underlying the site contains ketones, vinyl chloride, trichloroethene, benzene, and arsenic. Specific contaminants in leachate include ketones, lead, and arsenic. The soils contain the pesticide dieldrin, as well as lead and chromium. Pooled surface water on site is contaminated. The site could threaten the health of residents who ingest or come in direct contact with contaminated groundwater or inhale dust contaminated with heavy metals. Also, residents could be at risk from inhaling or coming in direct contact with contaminated surface soil, sediment, and surface water. Residents could be adversely affected by eating wild game with bioaccumulated contaminants. The berm completely surrounding the site presents a physical hazard for anyone entering the site.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on landfill wastes, surface water, and soil cleanup and cleanup of the groundwater.

Response Action Status

Emergency Actions: The EPA conducted an emergency action at the site in 1986, which included building on-site ponds and reshaping surface contours to manage water infiltration and runoff. A snow fence also was placed around the site to limit public access. All of the gullies on site were filled with compacted clay and clean fill. Surface runoff was redirected, and depression ponds were built to reduce movement of hazardous wastes. Berms were built around the outer perimeter of the site to stop surface water from leaving the site area. The EPA and the State agreed that further studies of the groundwater were needed to define the nature and extent of contamination.

Landfill Wastes, Surface Water, and Soil: The final selection of cleanup technologies to address contamination includes: (1) off-site disposal of 700,000 gallons of on-site pond water; (2) constructing a dike and diversion ditch system; (3) reshaping surface contours; (4) installing a multi-layer landfill cap and a gas collection system; (5) conducting groundwater monitoring; (6) limiting access to the site; and (7) restricting building in the area. The EPA is planning to begin designing the technical specifications for the selected cleanup technologies in 1991, and the design phase is expected to be completed in 1992.

Groundwater: The State is studying the nature and extent of the site's groundwater contamination. The study will define the major contaminants and will recommend the most effective way to clean up the site. The State plans to complete the study in 1991.

Site Facts: The State and the EPA signed a Cooperative Agreement to study the nature and extent of contamination at the site in 1984. The EPA issued Unilateral Orders to eight parties potentially responsible for site contamination to perform site cleanup.

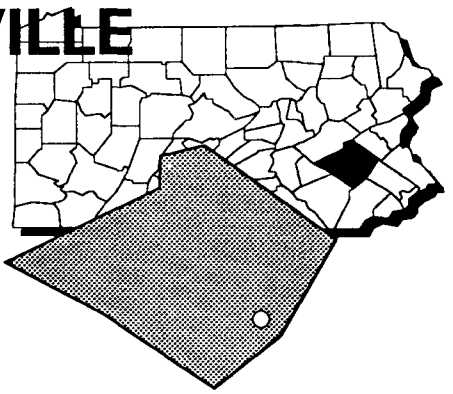
Environmental Progress

The EPA performed many emergency measures to make the Dorney Road Landfill site safer to the surrounding communities and the environment by controlling the sources of contamination. Cleanup technologies for the landfill wastes, surface water, and soil have been selected, and the design of these remedies is expected to begin soon. Studies leading to the selection of a final groundwater cleanup remedy currently are taking place.

DOUGLASSVILLE DISPOSAL

PENNSYLVANIA

EPA ID# PAD002384865



EPA REGION 3

CONGRESSIONAL DIST. 06

Berks County

Along the southern bank of the Schuylkill River

Other Names:
Reclamation Resources, Inc.
Berks Association, Inc.

Site Description

The 50-acre Douglassville Disposal site was a waste oil and recycling facility that operated from 1941 to 1986. The on-site features include the former processing equipment, storage tanks, and waste storage lagoons. From 1941 to 1972, waste oil sludge was placed in on-site lagoons. The contents were washed into the Schuylkill River during flooding in 1970 and 1972. After the 1972 flood, the sludge remaining in the lagoons was removed, and the lagoons were filled and seeded. Sludge generated in the oil recovery process was landfarmed on the site. From 1979 to 1982, about 700 drums, many leaking, were stored on the site. The site is not fenced but there are several large warning signs located at the entrance to the site and in the landfarm area. The population within a mile of the site is approximately 2,850. The site is located in a rural setting consisting of cropland, uncultivated fields, and light residential and industrial development. The segment of the river, along which the site is located, is designated for recreational activities and is extensively used as a source for municipal and industrial waters. Fishing occurs in the Schuylkill River and in the pond located just outside the site boundaries. The City of Pottstown has the closest municipal water intake from the river and is about 4 miles downstream.

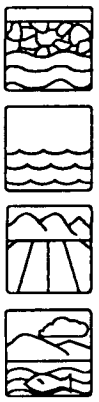
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Contaminants detected in on-site groundwater, surface water, and soil include various heavy metals, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Studies have detected PCBs and lead in locally caught fish. Specific contaminants in sediments include lead, chromium, and PCBs. Threats to human health include direct contact with on-site soils and sediments, ingestion of contaminated groundwater, or eating contaminated fish. Numerous wild animals are found at the site, and hunting is known to occur on the site.

Cleanup Approach

The site is being addressed in four stages: initial actions and three long-term remedial phases focussing on cleanup of lagoons, the tank farm, and the entire site.

Response Action Status

Initial Actions: In 1982, contaminated drums and surface soil were removed by a potentially responsible party to reduce the source of contamination and threat of exposure to contaminated materials.

Lagoons: The EPA completed a comprehensive investigation into lagoon and surface water contamination at the site and recommended remedies for final cleanup. The cleanup includes on-site thermal treatment and capping of waste areas left on site. This cleanup plan was re-evaluated and amended in the final phase of site cleanup.

Tank Farm: The final selection of cleanup technologies to address site contamination includes the dismantling of tanks and off-site thermal treatment of wastes. The EPA initiated tank farm cleanup activities in 1989, and final cleanup activities are scheduled to be completed in 1992.

Entire Site: A third remedy selection was completed in 1989 that amended the strategy for cleanup of the contaminated soils and remaining site areas. The remedy includes providing a soil cover over the former lagoon areas and on-site incineration of filter cakes and drainage-way wastes. Recent investigations have shown that contaminants in the groundwater do not exceed background levels and do not require cleanup actions. The Army Corps of Engineers completed the first design phase in 1990 and currently is designing the technical specifications for the second phase of the site cleanup. All phases of technical specifications are expected to be completed in 1992.

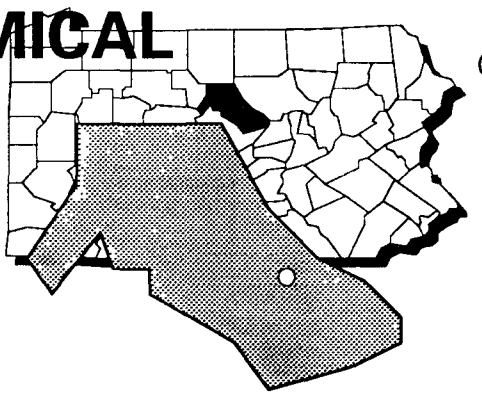
Environmental Progress

Cleanup actions to date have resulted in the removal and isolation of sources of contamination at the site, as well as having reduced the threat of exposure to contamination while the EPA continues to address the remaining areas of contamination at the Douglassville Disposal Site.

DRAKE CHEMICAL

PENNSYLVANIA

EPA ID# PAD003058047



EPA REGION 3
CONGRESSIONAL DIST. 23
Clinton County
Lock Haven

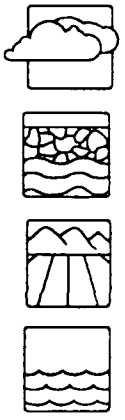
Site Description

The 8-acre Drake Chemical site operated as a chemical plant, manufacturing chemical intermediates for pesticides and other organic compounds. Operations started in the 1960s and ceased in the fall of 1981. The site contains six major buildings including former offices, production facilities, and a wastewater treatment building. There are approximately 60 process tanks and reactors inside and surrounding the process buildings. Outside the buildings are approximately 10 large tanks that were used for bulk storage of acids, bases, and fuel oils. Also located on site are two lined wastewater treatment lagoons, and two unlined lagoons. Chemical sludge and contaminated soils cover or underlay all of the open area on the site. The site is bounded by the American Color and Chemical Company. An apartment complex, a shopping center, and Castanea Township Park are located within 1/4 mile of the site. There are approximately 10,300 people living within a mile of the site. Bald Eagle Creek is located less than 1/2 mile south of the site, and the West Branch of the Susquehanna River is located approximately 3/4 mile north of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 07/01/82
Final Date: 09/01/83

Threats and Contaminants



The air in the vicinity of the site was contaminated in 1982 with oleum gas clouds thought to originate from a leaking pipe on the site. Groundwater is contaminated with acids and organic compounds. A contaminated leachate stream, originating at the site, flows through Castanea Township Park to Bald Eagle Creek. On-site buildings and structures were contaminated with pesticide residues. Sediment and surface water in Bald Eagle Creek is contaminated with the herbicide fenac. The soils are contaminated with organic compounds. Health threats include direct contact with or accidental ingestion of contaminated soil, groundwater, air, and the leachate stream. There is also the possibility of an on-site fire or explosion from accumulated gases.

Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on the leachate stream, the buildings and structures, and cleanup of soil, sludges, and groundwater.

Response Action Status

Immediate Actions: In 1982, the EPA removed 1,700 exposed drums and drained and neutralized tanks. The site has been secured by an 8-foot fence, and warning signs are posted along its perimeter. From 1988 through 1990, piping was removed and cleaned.

Leachate Stream: The design to eliminate the leachate stream was completed in 1986, and the EPA completed the majority of the construction in the same year. Final reshaping of surface contours to manage water infiltration and runoff and seeding was completed in 1987. The leachate stream pathway has been successfully cleaned up, and the threat of direct contact has been eliminated.

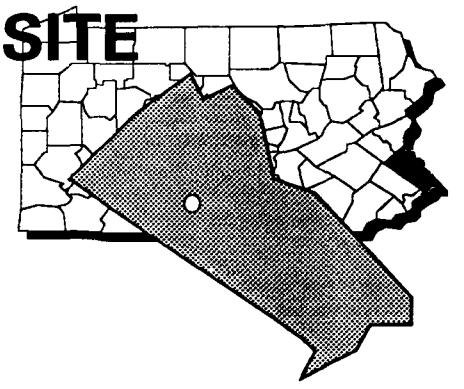
Buildings and Structures: The EPA selected removal of the buildings, lagoons, and other structures to an approved facility as the remedy for this source of contamination. This phase of the site cleanup was completed in spring 1989.

Soils, Sludges, and Groundwater: The EPA-selected remedy for the final cleanup of soils, sludges, and groundwater includes: excavation and incineration of on-site soils and sludges along with pumping and treatment of the contaminated groundwater. The EPA is preparing the technical specifications and design for the selected soil, sludge, and groundwater cleanup technologies. The design work is scheduled to be completed in 1992. The cleanup activities for soil and sludges are expected to commence in 1992; and in 1993 for groundwater.

Environmental Progress

The EPA has completed many phases of the planned cleanup solution, such as the removal of contaminated drums, construction of a security fence, diversion of the leachate stream, and the demolition and removal of contaminated buildings and structures. These actions have made Drake Chemical safer while awaiting the beginning of final cleanup activities.

DUBLIN TCE SITE
PENNSYLVANIA
EPA ID# PAD981740004



EPA REGION 3
CONGRESSIONAL DIST. 08
Bucks County
Dublin Borough

Other Names:
Dublin Water Supply

Site Description

The 4 1/2-acre Dublin TCE Site is located in Dublin Borough. In 1986, the Bucks County Health Department discovered trichloroethylene (TCE) in 23 tap water samples. The highest TCE concentrations were found in a well on the property occupied by several industrial operations over the past 50 years. This property is thought to be the likely source of the contaminants. The site property was acquired in 1986 by John H. Thompson, who is using the main building to restore antique race cars. Laboratory Testing, Inc. has leased part of the property since 1986. The water supplies of approximately 170 homes, apartments, and businesses in Dublin have been affected by this contamination. An estimated 10,100 people obtain drinking water from public and private wells within 3 miles of the site. The sole source of drinking water in the area is the Brunswick and Lockatong Formations. The formations are connected hydraulically, permitting water to move between them.

Site Responsibility: The site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/26/89
Final Date: 08/30/90

Threats and Contaminants

Groundwater is contaminated with TCE. Potential health threats to people include drinking and inhaling of TCE from groundwater used for washing and direct contact with contaminated groundwater.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1987, a potentially responsible party, John H. Thompson, began providing an alternate water supply to persons affected by the contaminated wells and is periodically sampling wells in the area. Thompson is supplying persons affected by the contaminated water with carbon treatment systems. The Consent Order was amended in 1991 to expand the full-house carbon treatment systems for lower levels of TCE found in drinking water wells. In addition, Thompson is required to monitor the wells.

Entire Site: Under EPA supervision, an investigation into the nature and extent of groundwater and soil contamination at the site is planned to begin in late 1991. The investigation will define the contaminants of concern and will recommend alternatives for site cleanup. The investigation is scheduled to be completed in 1993.

Site Facts: In 1987, a potentially responsible party, John H. Thompson, entered into a Consent Order with the EPA that required provision of water treatment systems or bottled water to residents with contaminated wells and the periodic sampling of wells in the area. Thompson performed preliminary soil and groundwater investigations at the request of the State. The State entered into a Consent Order with Sequa Corporation, a potentially responsible party, to perform a groundwater and source investigation and the groundwater cleanup activities at the site.

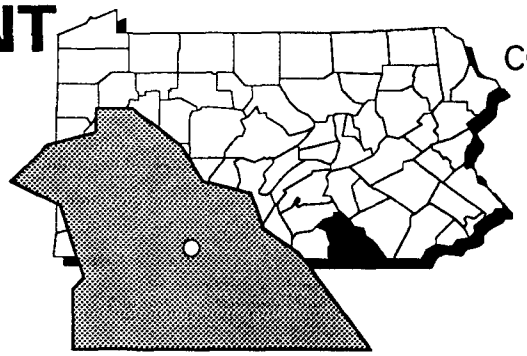
Environmental Progress

By supplying affected residents with carbon treatment systems and monitoring these systems, the EPA and the potentially responsible parties have reduced the potential for exposure to hazardous materials in the water from the Dublin TCE Site.

EAST MOUNT ZION

PENNSYLVANIA

EPA ID# PAD980690549



EPA REGION 3

CONGRESSIONAL DIST. 19

York County

Springettsbury Township

Other Names:
Fetrow Rubbish Dump

Site Description

The East Mount Zion site is a privately owned, inactive 10-acre landfill that accepted municipal and industrial wastes, including electroplating sludges, from 1955 to 1972. The Pennsylvania Department of Environmental Resources (PADER) attempted to close the dump during the 1960s and early 1970s. After extensive legal action, the site was closed in 1972. Final closing activities, including a final soil cover and seeding, were completed in 1976; however, groundwater resources underlying the site had become contaminated from landfill wastes. Within a mile of the site are small groupings of rural residences; the nearby population is approximately 200. Approximately 30,000 people use the Rocky Ridge County Park, which has an entrance near the site, each year.

Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs) from contamination at the site. Leachate seeps on site are is contaminated with copper and zinc. Consumption of contaminated groundwater poses a risk to nearby residents. However, residential wells in the area show no signs of contamination. People who come in direct contact with or accidentally ingest leachate may be at risk. Additionally, surface waters and wetlands located in the area are used for recreation.

Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: Based on studies conducted by the State, the EPA selected a remedy for the site in 1990. The remedy consists of installation and maintenance of an impermeable cap over the land fill, surface water control systems for the cap, and a fence around the site. Continued groundwater monitoring and deed restrictions regarding future activities at the site will ensure the effectiveness of this remedy. The EPA began designing the remedy in 1990 and is expected to complete the technical specifications in late 1991.

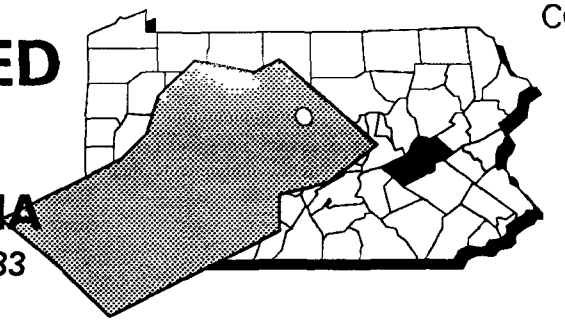
Environmental Progress

After adding this site to the NPL, the EPA and the State of Pennsylvania performed preliminary investigations at the site and determined that the East Mount Zion site does not pose an imminent threat to the public or the environment while cleanup activities are being planned.

EASTERN DIVERSIFIED METALS

PENNSYLVANIA

EPA ID# PAD980830533



EPA REGION 3

CONGRESSIONAL DIST. 06

Schuylkill County

Rush Township

Other Names:
Eastern Diversified Metals

Site Description

The 25-acre Eastern Diversified Metals site is a former wire recycling facility. From 1966 to 1977, the company disposed of approximately 150 million pounds of "fluff" (waste insulation material) from the recycling of copper wire in an open pile 40 feet high and covering an area 250 by 1,500 feet. The waste pile produced phenolic leachate. In 1974, the company installed a wastewater treatment plant, diversion ditches, and an interceptor trench that diverts shallow groundwater to the treatment plant. The surface impoundment associated with the wastewater treatment plant sometimes overflows into a tributary to the Little Schuylkill River, which is used for trout fishing and is located within 3 miles downstream of the site. The site is underlain by Mauch Chunk Formation, one of the most important water-bearing formations in Northeastern Pennsylvania. Approximately 1,400 people are served by wells that are within 3 miles of the site and draw on the Mauch Chunk Formation for their water supply. There are about 1,600 people living within a 1-mile radius of the site. The distance from the site to the nearest residence is approximately 1,000 feet. An intermittent tributary to the Little Schuylkill River that is used for recreational activities drains south of the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 06/01/86

Final Date: 10/04/89

Threats and Contaminants

Volatile organic compounds (VOCs) and manganese from former site operations have been detected in the groundwater. The contaminants detected in on-site leachate and sediments consist of heavy metals including copper, lead, manganese, and zinc, polychlorinated biphenyls (PCBs) and VOCs. Dioxin, PCBs, and lead are the principal contaminants in the main fluff pile. Potential health threats include direct contact with and accidental ingestion of contaminated groundwater, sediment, leachate, and surface wastes. There is also a possibility of risk from the consumption of contaminated fish taken from area tributaries and rivers.

Cleanup Approach

This site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the hot spot areas, groundwater, and the remainder of the site.

Response Action Status

Immediate Actions: In response to a 1987 EPA directive, the parties potentially responsible for the site contamination constructed a security fence around the site to restrict access to the site and to reduce the potential of exposure to contaminated areas.

Hot Spot Areas: Based on the investigation conducted by the parties potentially responsible for site contamination, the EPA selected a final remedy for the hot spot areas. The remedy consists of excavation and incineration of dioxin- and PCB-contaminated fluff and removal of lead-contaminated soils and sediments contaminated with heavy metals. Also included in the remedy is the upgrade of the wastewater treatment facility and the equalization lagoon. Improvement of the existing site fence and continued site maintenance are planned to ensure the effectiveness of this remedy. Design work is scheduled to begin in 1992.

Groundwater: Based on the studies performed by the potentially responsible parties, the EPA selected an interim remedy to address groundwater contamination. The interim remedy involves installing a deeper groundwater collection trench parallel to the existing trench and further study of the practicality of deep groundwater cleanup. Issues such as long-term effectiveness and permanence will be addressed in the final remedy.

Remainder of the Site: The potentially responsible parties currently are conducting an investigation into the nature and extent of the contamination at the site. The investigation will define the contaminants and will recommend alternatives for the final cleanup.

Site Facts: In 1974, as a result of a Consent Agreement with the State, the company installed a wastewater treatment plant, diversion ditches, and an interceptor trench that diverts shallow groundwater to the treatment plant. In 1987, the EPA issued a Unilateral Administrative Order to the potentially responsible parties for construction of a security fence.

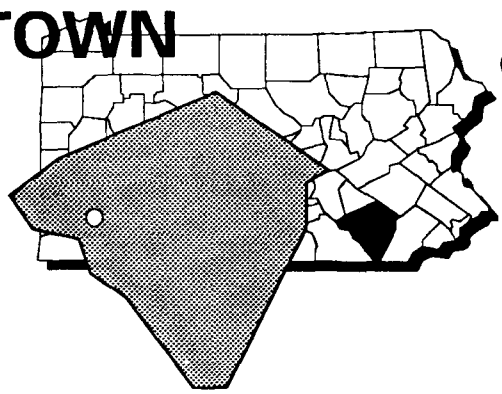
Environmental Progress

Initial actions to limit public access to the Eastern Diversified Metals site have reduced the potential for accidental exposure to contamination at the site, making it safer while further study, design, and cleanup activities are completed.

ELIZABETHTOWN LANDFILL

PENNSYLVANIA

EPA ID# PAD980539712



EPA REGION 3

CONGRESSIONAL DIST. 16

Lancaster County

1 mile southwest of Elizabethtown

Other Names:
United Disposal

Site Description

The 15-acre Elizabethtown Landfill site is an unlined sandstone quarry that operated as an unlicensed sanitary landfill from about 1958 to 1973, accepting an unknown quantity of industrial and municipal wastes from surrounding communities. In 1985, the EPA detected volatile organic compounds (VOCs) and manganese in monitoring wells and a leachate stream emanating from the landfill area. In 1986, the site was covered with 2 feet of clay and 6 inches of topsoil, vents were installed to control methane gas accumulation, and a leachate collection system to prevent contamination from moving away from the site was installed. A sedimentation basin also was constructed, and a drainage system to channel runoff to the basin was installed. An estimated 13,200 people obtain drinking water from public and private wells within 3 miles of the site. A private well is 800 feet from the site. The area surrounding the site is largely agricultural and rural. Conroy Creek, which is 800 feet downgradient of the site, is used for recreational activities.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 06/16/88

Final Date: 03/31/89

Threats and Contaminants

The groundwater contaminants include the VOC benzene and heavy metals including manganese and lead. Leachate from the landfill is contaminated with VOCs and has been seeping into Conroy Creek. Potential health threats include accidental ingestion of contaminated groundwater in the drinking water supply and direct contact with polluted surface waters.

Cleanup Approach

The site is being addressed in a single long-term remedial phase concentrated on cleanup of the entire site.

Response Action Status

Entire Site: In 1990, the potentially responsible parties began an investigation into the nature and extent of groundwater and leachate contamination at the site. The investigation will define the contaminants and will recommend alternatives for final site cleanup. Once the studies are completed, expected in 1992, the EPA will select final cleanup remedies for site contamination.

Site Facts: In September 1990, the potentially responsible parties entered into a Consent Agreement with the EPA to conduct studies of the site to determine the nature and extent of contamination.

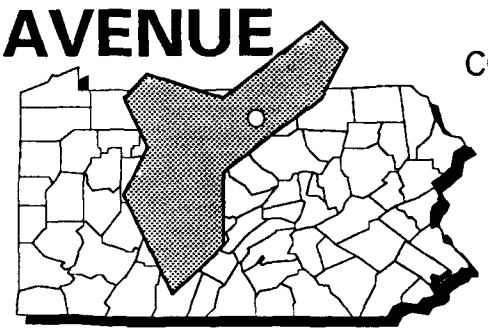
Environmental Progress

After placing the Elizabethtown Landfill site on the NPL, the EPA completed an assessment of site conditions and determined that the site currently does not pose an imminent threat to public health or the environment while investigations are undertaken to identify contamination levels and cleanup alternatives.

ENTERPRISE AVENUE

PENNSYLVANIA

EPA ID# PAD980552913



EPA REGION 3

CONGRESSIONAL DIST. 07

Philadelphia County
Philadelphia

Site Description

The Enterprise Avenue site, located in an industrial area in the city of Philadelphia, near the eastern end of the Philadelphia International Airport, encompasses a total of 57 acres. Until 1976, the Philadelphia Streets Department used the site for the disposal of incineration residue, fly ash, and bulky debris. Drums containing various industrial and chemical wastes were buried illegally at the site by several waste handling firms. In response to the situation, the Philadelphia Water Department conducted exploratory excavations during 1979 to confirm the alleged waste dumping. Approximately 1,700 drums that contained, or had once contained, such wastes as paint sludges, solvents, oils, resins, metal finishing waste, and solid inorganic wastes were discovered on the site. Approximately 1 million people live within a mile of the site in the Philadelphia area.

Site Responsibility: This site was addressed through a combination of Federal, State, and Municipal actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 03/07/86

Threats and Contaminants

The soil on site was contaminated with various organic compounds from the waste disposal practices. Potential risks existed if direct contact was made with contaminated soil or if soil was accidentally ingested.

Cleanup Approach

The site was addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: In 1982, the City began cleanup measures at the site in which all drums and drum fragments were removed and disposed of off site, and 32,600 cubic yards of contaminated soil were excavated and placed in a federally approved facility off site. The remaining contaminated soil was stockpiled on site in two separate piles, and a partial cover was installed. The EPA selected a remedy to clean up the soil, which included removal of the remaining contaminated soil and completion of further precautionary measures, including installation of a cap and revegetation of the area. In 1984, the State tested the soil remaining on site for contamination. Contaminated soil was disposed of at an off-site approved facility. The site then was capped and revegetated as a further precautionary measure, and a fence was installed around the site area. The EPA, with the concurrence of the Commonwealth of Pennsylvania, has determined that no further cleanup by the potentally responsible parties is appropriate. The Pennsylvania Department of Environmental Resources (PADER) agreed to operate and maintain the site. The PADER also has developed and implemented an operations and maintenance plan for the cap which was approved by the EPA, and will monitor the groundwater to ensure that the water quality remains at background levels. The EPA and the PADER have determined that the site has met all cleanup criteria, and the site has been deleted from the NPL.

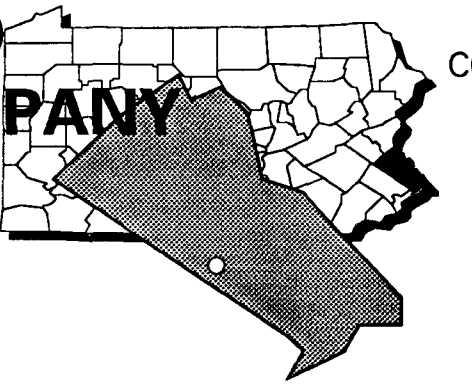
Environmental Progress

As a result of the cleanup activities described above, the EPA determined that all site contamination has been addressed and that the site no longer is a threat to the public or the environment. Therefore, the site has been deleted from the NPL.

FISCHER AND PORTER COMPANY

PENNSYLVANIA

EPA ID# PAD002345817



EPA REGION 3
CONGRESSIONAL DIST. 08
Bucks County
Warminster

Site Description

The 6-acre Fischer and Porter (F&P) Company site is an active facility that produces waterflow and process control equipment. In 1979, volatile organic compounds (VOCs) were detected in local groundwater. This contamination reached some public water supply wells of the Hatboro Borough and Warminster Heights Water Authorities, forcing several to be closed in 1979. The wells since have been reopened with treatment to remove contaminants. Until 1986, a degreasing agent used at the facility was stored in a 2,000-gallon underground tank; however, F & P's investigations of the underground storage tank have shown it to be intact. About 30,000 people within a 3-mile radius of the site depend on the groundwater for their drinking water supply. The F&P property drains to an unnamed tributary of Pennypack Creek, located 1,000 feet north of the plant. F&P depended on wells for drinking water at one time, but has switched to an alternate water supply source.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants

VOCs from former process wastes were detected in industrial wells at the F & P property and in nearby municipal water supply wells for the towns of Hatboro and Warminster Heights. Drinking water sources have been equipped with contamination treatment devices.

Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: In 1986, F & P began pumping and treating contaminated groundwater from three on-site wells. The Hatboro Borough and Warminster Heights Water Authorities installed permanent treatment systems for the public water supply. The full on-site recovery system went into operation in 1986. Hatboro Borough also completed the installation of air strippers to remove contaminants at certain wells. F & P will continue to operate the treatment system and will report to the EPA.

Site Facts: A Consent Decree was signed by F & P, agreeing to pump and treat groundwater from three on-site wells. F & P also contributed money to the Hatboro Borough and Warminster Heights Water Authorities so that permanent treatment systems for the public water supply could be installed.

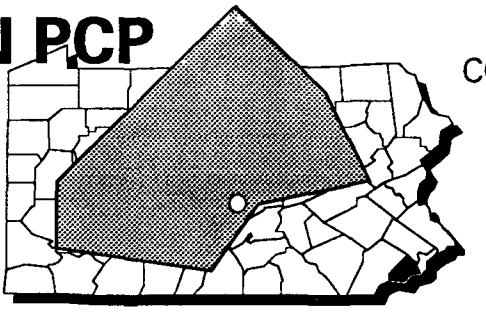
Environmental Progress

The pumping and treatment operations currently underway at the F&P facility continue to reduce groundwater contamination levels. These ongoing actions, as well as the closure of contaminated wells and installation of other treatment devices, have ensured a safe public drinking supply for affected residents.

HAVERTOWN PCP

PENNSYLVANIA

EPA ID# PAD002338010



EPA REGION 3

CONGRESSIONAL DIST. 07

Delaware County
Havertown Township

Other Names:
National Wood Preservers

Site Description

From 1947 to 1963, National Wood Preservers disposed of liquid wastes, primarily oil contaminated with pentachlorophenol (PCP), into a well that entered the groundwater under the plant. The liquid wastes leached into nearby Naylor's Run, a small stream that flows through a residential area and eventually into the Delaware River. In 1976, the EPA took emergency action to contain the leaching by drilling recovery wells and pumping PCP to the surface for treatment. National Wood Preservers currently is in operation but uses copper, chromium, and arsenic instead of PCP as part of the wood preserving process. Approximately 26,000 people live within a mile of the site.

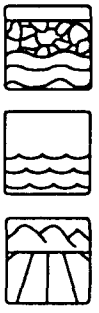
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater, surface water, and soil are contaminated with PCP, volatile organic compounds (VOCs), and oils. The soil also is contaminated with various inorganic chemicals. Contaminated wastes have leached into Naylor's Run. People who accidentally ingest or come in direct contact with contaminated soil, groundwater, or surface water may be at risk.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases.

Response Action Status

Immediate Actions: In 1987, the EPA installed a fence to restrict access to the site and constructed sorbent booms and a catch basin in Naylor's Run to contain the chemicals.

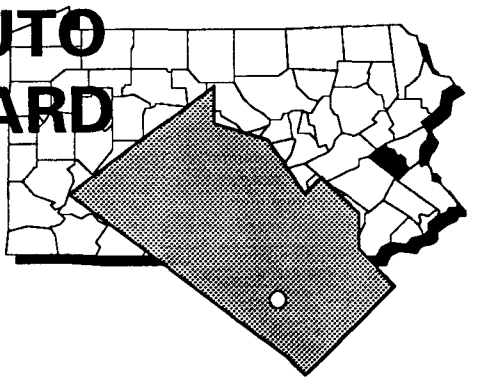
Source Control: The EPA decided in 1989 to install an oil and water separator in the existing catch basin at Naylor's Run and remove tanks and drums of liquid wastes from earlier cleanup actions conducted by the EPA and the State. The EPA began site cleanup in 1990. The oil and water separator has been installed, and drums and tanks of waste have been removed. Security improvements and regrading is underway. The cleanup activities are being evaluated for effectiveness.

Groundwater: The EPA currently is conducting a study to determine the extent of the groundwater and other site contamination. The EPA will recommend alternatives to clean up the contamination. The study is planned to be completed in 1991.

Environmental Progress

By fencing the site and taking actions to stem the further spread of site contamination, the EPA has reduced the potential of exposure to contamination and has made the Havertown PCP site safer while conducting a study of the groundwater contamination.

HEBELKA AUTO SALVAGE YARD
PENNSYLVANIA
EPA ID# PAD980829329



EPA REGION 3
CONGRESSIONAL DIST. 15
Lehigh County
Weisenberg Township

Site Description

The 10-acre Hebelka Auto Salvage Yard site is in a rural area of Lehigh County. From 1958 to 1983, approximately 750 to 1,000 cubic yards of battery casings were disposed of on site in two areas. In addition, automobiles, empty storage tanks, empty drums, and miscellaneous scrap metals were disposed of in the yard. Storage tanks are still disposed of on the site; however, this practice is under review by the State. In 1985, the EPA conducted an on-site investigation and discovered contamination in sediments at Iron Run Creek, which is a tributary of Lehigh Creek, a cold water fishing stream. Two residences are located within the site boundary. There are 10 residences within 1,000 feet of the site. The population within a 1-mile radius of the site is approximately 300, and 1,000 people live within 2 miles. Approximately 2,800 people draw water from three Lehigh County Water Authority wells within 3 miles of the site; another 500 people use private wells.

Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 07/01/87

Threats and Contaminants

One unfiltered groundwater sample showed elevated levels of lead, but the sample was muddy and inconclusive. Groundwater will be resampled during another phase of the investigation. Sediments, soil, and sludges are contaminated with lead from former disposal practices. Because the site is not fenced, on-site workers or trespassers are at risk by coming into direct contact with or accidentally ingesting, liquids from batteries or solid waste. People who use Iron Run Creek for recreational purposes may come into contact with contaminated sediment. Although Iron Run is a tributary to Lehigh Creek, it does not appear that contamination has spread farther downstream.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on the battery casings and surrounding soil and groundwater, surface water, sediment, air, and soil air.

Response Action Status

Battery Casings: In 1989, the EPA selected a remedy to clean up the site that includes stabilizing the lead-contaminated soil by mixing it with a hardening agent such as cement or lime to form a solid and removal to an off-site facility. This prevents contaminants from leaching from the soil. In addition, the battery casings will be removed to an approved facility and recycled where possible. The EPA is preparing the technical specifications and design for cleaning up the soil. The design phase is expected to be completed in 1992.

Groundwater, Surface Water, Sediment, Air and Soil Air: The EPA will sample the groundwater, surface water, sediment, air, and soil air at the site to confirm the lead contamination and to determine the extent of contamination. Once the study is completed, expected in 1991, the EPA will recommend alternatives for cleanup.

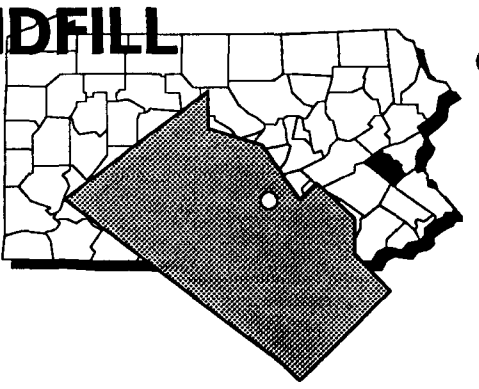
Environmental Progress

After adding the Hebelka Auto Salvage site to the NPL, the EPA determined that the site does not pose an imminent threat to the public or the environment while waiting for investigations and cleanup activities to be completed.

HELEVA LANDFILL

PENNSYLVANIA

EPA ID# PAD980537716



EPA REGION 3
CONGRESSIONAL DIST. 15
Lehigh County
North Whitehall Township

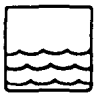
Site Description

The Heleva Landfill site consists of about 20 acres on a 93-acre parcel of land. In the late 1800s, the site area was a large open-pit iron ore mining operation. The mining operations left four open, water-filled pits. Two of these pits are on site: both were covered over by a landfilling operation. The site began operations as a sanitary landfill in 1967 and accepted general mixed refuse, including paper, wood, and orchard wastes. Unconfirmed types and amounts of industrial wastes, including solvents, were reported to have been sent to the site beginning in that same year. Detection of contamination in the West Ormrod Water Association Well, 1/4 mile southeast of the site, led to its closing. The site was closed in 1981, and the owner covered the waste area with 2 feet of clay soil. Groundwater discharges from the landfill flow into Todd Lake, Coplay Creek, and Whitehall Quarry, all of which are used for recreational purposes. Coplay Creek is a tributary of the Lehigh River. The area within a 3-mile radius of the landfill is primarily rural, with the greatest portion being farmland and pastures. Some of the land adjacent to the landfill is used for raising crops. A large percentage of the population around the site live in small residential communities that pocket the area. Ormrod, a village of approximately 35 families, is located about 1/4 mile southeast of the site. Ironton, with a population of 150 residents, is 1/4 mile to the west. An elementary school is located about 1,500 feet south of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs) from former site activities. On-site soils also are contaminated with VOCs. People who come into direct contact with or accidentally ingest contaminated groundwater or soil may be at risk.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on groundwater and soil cleanup.

Response Action Status

Immediate Actions: The West Ormrod Water Association well was closed down due to contamination. Bottled water was provided in 1985 and 1988 to homes with contaminated wells. In 1986, the North Hampton Water Company extended an existing water line to provide water for 35 homes that had been drawing water from the contaminated well. In 1989, three additional homes with contaminated wells were discovered. Extension of the water line to these homes is underway; completion is expected in 1993.

Groundwater: In 1985, the EPA selected remedies for groundwater contamination at the site, which include: (1) installing a soil cover and construction of a surface water diversion system; (2) installing a gas venting system and monitoring of gases at the vents and at the landfill boundary; (3) construction of an on-site treatment facility to treat the contaminated groundwater before discharging it into Coplay Creek; (4) extending the public water supply to residents whose groundwater supply wells have been or potentially could be contaminated; and (5) monitoring the groundwater until all residents in the vicinity are connected to the public water supply. The EPA also studied the groundwater and determined that pumping groundwater to remove the contaminant plume was necessary. Construction of the soil covering for the landfill and gas venting system have been completed. The EPA is preparing the technical specifications and design for the groundwater pumping system. Construction of the groundwater pump and treatment system is scheduled to begin in 1993, upon completion of the technical specifications.

Soil: The EPA is conducting an additional investigation to study the nature and extent of the soil contamination in the vicinity of the landfills. The EPA completed an investigation of the soil contamination and performed a treatability study in 1990. However, further analysis for selection of cleanup remedy is pending.

Site Facts: The EPA issued two Unilateral Orders (February 1985 and March 1985) and two Administrative Orders of Consent (February 1985 and August 1988), as well as a Consent Agreement, to the potentially responsible parties to provide bottled water for the homes affected by the contamination of the groundwater.

Environmental Progress

Closing the contaminated well and providing alternate drinking water to affected residents have eliminated all potential health risks posed by drinking contaminated groundwater and have made conditions at the Heleva Landfill site safer while further investigations and cleanup activities are taking place.

HELLERTOWN MANUFACTURING CO.

PENNSYLVANIA

EPA ID# PAD002390748

EPA REGION 3

CONGRESSIONAL DIST. 15

Northampton County

Hellertown

Other Names:
Champion Spark Plug Company

Site Description

The Hellertown Manufacturing Co., a subsidiary of Champion Spark Plug Company, formerly manufactured spark plugs at this site. The site area includes five former lagoons encompassing approximately 9 acres. Operations at the facility began in 1930 and continued until it closed in 1982. From 1930 to 1976, Hellertown used the five on-site lagoons for the disposal of wastes including cleaners, cutting oils, zinc plating waste, and chrome dip waste. The lagoons were unlined, allowing wastes to seep into the local soils. In 1970, the company reported that it discharged 300,000 drums of wastes to the lagoons. All five lagoons were filled in 1976 with excavated material. Private wells are located within 1/4 mile of the site. Groundwater underlying the site is contaminated. An aquifer within 3 miles of the site supplies water to the Hellertown Water Company, the Bethlehem Steel Corporation plant, and private residences, affecting approximately 15,000 people. Saucon Creek is located approximately 1,000 feet off site and is used for fishing.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 03/31/89

Threats and Contaminants

Groundwater underlying the site is contaminated with volatile organic compounds (VOCs), according to tests conducted by the Pennsylvania Department of Environmental Resources (PADER) in 1985. On-site soils and sludges from the lagoons are contaminated with chromium and cyanide from former manufacturing process wastes. On-site workers may be threatened by coming in direct contact with or accidentally ingesting contaminated soils, sludges, or groundwater. On-site cleanup activities also may stir up dusts, which are hazardous to inhale. Individuals may be at risk if they ingest contaminated groundwater or fish, or come into direct contact with contaminated water.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: Site access was restricted to minimize entry by unauthorized personnel.

Entire Site: The parties potentially responsible for the site contamination initiated a study in 1988 to determine the extent of the contamination at the site and to identify alternative technologies for cleanup. The first phase of the report is completed, and the final report is due to the EPA in 1991.

Site Facts: Champion Spark Plug Company signed a Consent Order with the EPA in 1988 to study the contamination and to identify alternative technologies for cleanup.

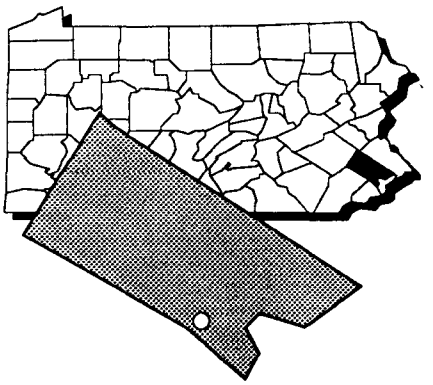
Environmental Progress

By restricting site access, the potential for exposure to hazardous materials to nearby residences has been greatly reduced at the Hellertown Manufacturing Co. site while studies are completed and cleanup activities are started.

HENDERSON ROAD

PENNSYLVANIA

EPA ID# PAD009862939



EPA REGION 3

CONGRESSIONAL DIST. 13

Montgomery County
Upper Merion Township

Other Names:
O'Hara San. Co. Inc.
ABM/O'Hara
O'Hara Injection Well

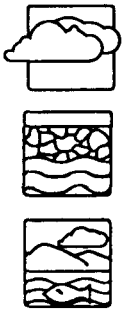
Site Description

The Henderson Road site occupies 7 acres in a commercial business area of Upper Merion Township. Since 1975, O'Hara Sanitation has used the site for waste storage, waste recycling, vehicle maintenance and parking, and office facilities. A former industrial water supply well was used to dispose of industrial liquid wastes during the 1970s. The injection well lies beneath the floor of the O'Hara Sanitation maintenance garage. Other areas of concern include an area of previously ponded water and a landfill located 200 feet east of the well, containing approximately 158,000 cubic yards of landfill material. Additionally, about 21,000 cubic yards of trash and cinder fill were disposed of on adjacent properties. The landfill did not have a permit and contains a mixture of construction demolition debris and other commercial wastes, cinders, a former trenching area, and four underground storage tanks. Liquid waste, sludge, and drums also may have been disposed of at the landfill. The site is approximately 2,000 feet upgradient of the Upper Merion Reservoir, which is part of a public water supply serving 800,000 customers, and 350 feet from McIlvain Lumber Company, where a water supply well serves 15 employees. Apartment complexes and private homes are situated beyond the neighboring industrial facilities of the site. The population residing within a mile of the site is approximately 5,000 people. A school is located 3,000 feet south of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants



Air sampling has detected chemicals including polycyclic aromatic hydrocarbons (PAHs), chromium, barium, and benzidine from former disposal activities. Principal on-site threats to groundwater are volatile organic compounds (VOCs) such as benzene, vinyl chloride, chloroform, and trichloroethylene (TCE); heavy metals; and cyanide. The major potential health risk is drinking contaminated groundwater. People also could be exposed to site contaminants from ingestion of or direct contact with soils and inhalation of vapors generated by cleanup activities. There is a potential environmental impact on the adjacent intermittent stream from site runoff.

Cleanup Approach

The site is being addressed in two long-term remedial phases directed at cleanup related to an injection well and cleanup of the landfill.

Response Action Status

Injection Well: This phase of the cleanup addresses groundwater contamination caused by the injection of hazardous substances into an on-site well before 1977. The design of the technical specifications for the cleanup began in 1989. Currently, one private off-site well is being treated by carbon adsorption. Construction of the groundwater treatment plant is underway, with expected completion in 1993.

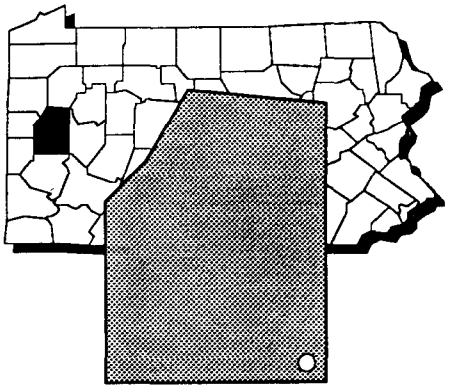
Landfill: The Western Zone of the site has been investigated, as well as the surface drains. The selected cleanup remedy includes capping of the landfill, leachate collection and stormwater management. In addition, debris from an adjacent property will be removed, and that property will be characterized further for possible cleanup; monitoring of the need for groundwater recovery and treatment will be undertaken; land use will be restricted; and the need to treat or cap the western portion of the site will be studied. The design of the technical specifications for the cleanup began in 1990. Construction of the leachate collection system currently is underway, and completion of the system is scheduled for 1991.

Site Facts: In 1985, an Administrative Order of Consent was signed by the EPA and nine respondents to perform a study to determine the extent of the contamination. A Consent Decree was entered into in June 1989 in which the parties potentially responsible for the site contamination agreed to clean up the injection well and the groundwater.

Environmental Progress

The EPA has determined that immediate actions were not required at the Henderson Road site. Initial groundwater cleanup actions have commenced while the final remedy for groundwater contamination is being designed and additional remedies are finalized for the Western Zone, landfill, and surface drain areas of the site.

HRANICA LANDFILL
PENNSYLVANIA
EPA ID# PAD980508618



EPA REGION 3
CONGRESSIONAL DIST. 04
Butler County
Buffalo Township

Site Description

The Hranica Landfill is a 14-acre drum disposal, landfill, and incineration facility located in a farming community. The privately-owned landfill operated from 1966 to 1974. The site originally contained over 7,700 55-gallon drums and larger vessels of waste composed of solvents, paint pigments, and metal sludges. In 1984, all the drums and contaminated soil were removed from the site. The area was then capped, graded, and seeded. A subsequent investigation of the site showed that soil, surface water, and groundwater are contaminated. There are approximately 4,000 people living within a 3-mile radius of the site, and there are private wells near the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants

The groundwater and soil are contaminated with heavy metals and volatile organic compounds (VOCs) from former site operations. Surface water also is contaminated with VOCs. In addition to the above contaminants, the soil and surface water also are contaminated with polychlorinated biphenyls (PCBs) and phenols. Prior to the 1984 cleanup operation, a tainted supply of cow's milk was condemned, and nearby springs were reported to be contaminated. These springs are used for irrigation and as water supplies for livestock. More recent testing suggests the springs no longer are contaminated. People who come in direct contact with or accidentally ingest contaminated soil or water may be at risk.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the soil and the groundwater.

Response Action Status

Immediate Actions: In 1984, two of the parties potentially responsible for the site contamination removed all the drums and 5,000 cubic yards of contaminated soil. The excavated areas were covered with soil and then seeded to establish a vegetative cover.

Soil: In 1990, the potentially responsible parties completed a study determining the type and extent of soil contamination at the site. The EPA has chosen to cap contaminated areas and repair an existing cap with 2 feet of clay. The design of the remedy is scheduled to begin in 1991.

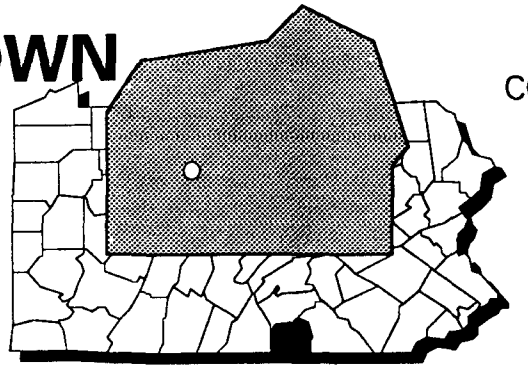
Groundwater: An investigation will be conducted into the nature and extent of contamination in the shallow aquifer. While the shallow aquifer is not productive enough to be used as a drinking water source, the study will address any groundwater cleanup that may be necessary.

Site Facts: The EPA and the potentially responsible parties entered into an Administrative Order in 1987 requiring the potentially responsible parties to conduct a hydrogeological and soil study of the site.

Environmental Progress

By removing the contaminated drums and soil from the Hranica Landfill site, the potentially responsible parties and the EPA have reduced the potential of exposure to hazardous wastes. These actions have made the site safer while further investigations are conducted and a final cleanup method is being designed.

HUNTERSTOWN ROAD
PENNSYLVANIA
EPA ID# PAD980830897



EPA REGION 3
CONGRESSIONAL DIST. 19
Adams County
Straban Township

Other Names:
Fred Shealer Property
Westinghouse #2

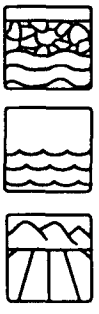
Site Description

The 3-acre Hunterstown Road site served as the recipient of wastes generated by several local corporations from 1970 through 1980. Throughout its history, the operation had no permit. The majority of the waste, consisting of paint sludges and various solvents, was dumped on the site grounds. A waste lagoon and contaminated soil have been excavated on the site. A fence has been constructed around the lagoon area. There are several small streams on site. Approximately 9,500 people live in the area and use wells within 3 miles of the site for drinking water.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants



The groundwater and surface water are contaminated with volatile organic compounds (VOCs) from wastes dumped on site. Soils are polluted with heavy metals and asbestos. Possible health threats include accidentally ingesting or coming in direct contact with contaminated soils and drinking polluted water.

Cleanup Approach

This site is being addressed in two stages: emergency actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Emergency Actions: In 1984, a party potentially responsible for the site contamination excavated a waste lagoon and contaminated soil and transported the materials off site to an approved facility for disposal. The EPA constructed a fence around the lagoon area and, in 1985, took on- and off-site soil and water samples. In 1989, buried drums were removed, and the area was backfilled.

Entire Site: A potentially responsible party is conducting an investigation into the nature and extent of contamination at the site. The investigation will define the contaminants and will recommend alternatives for the final cleanup. The investigation is planned to be completed in 1992.

Site Facts: In 1984, the EPA issued an Administrative Order to a potentially responsible party, which addressed excavation of a waste lagoon and contaminated soil and transportation of materials off site for disposal. In 1985, the EPA and the Commonwealth of Pennsylvania signed a multi-site Cooperative Agreement providing funds for an investigation into the nature and extent of contamination at the site. In 1988, a Consent Order was issued between the EPA and a potentially responsible party to remove contaminated drums.

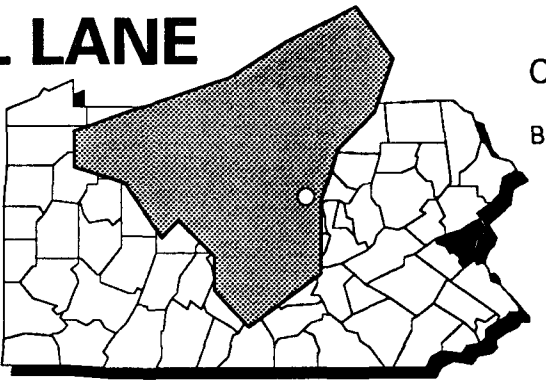
Environmental Progress

Fencing the site, transporting contaminated materials off site, and removing contaminated drums have reduced the potential for exposure to hazardous substances at the Hunterstown Road site while final cleanup activities are being planned.

INDUSTRIAL LANE

PENNSYLVANIA

EPA ID# PAD980508493



EPA REGION 3

CONGRESSIONAL DIST. 15

Northampton County

Borders South Easton and the Lehigh River, 15 miles east of Allentown

Other Names:
Chrin Bros Inc. Landfill
Industrial Lane Landfill
South Easton Site

Site Description

The Industrial Lane site includes a zoned industrial area and a 30-acre sanitary landfill. The Chrin Landfill began operating as an open dump in 1961. The community of Glendon Borough is located in the north-western portion of the study area. Lucy's Crossing is located in the southwestern portion of the study area, and Morgan Hill is situated in the southeastern portion of this area. The groundwater used by the local residences is obtained from a complex bedrock aquifer. Groundwater contamination has been documented since 1980. Past industrial uses that may have contributed to site contamination include iron ore extraction and iron works operations. The Easton City Suburban Water Authority obtains its raw water from the Delaware River. The intake is located approximately 1 1/2 miles up the Delaware River from the confluence of the Delaware and Lehigh Rivers. There are 1,140 people living within 1 mile of the site. Lucy's Crossing, Glendon Borough, and the Morgan Hill area contain 152 residences, all located along Industrial Drive. Twenty four private wells were located in Lucy's Crossing and Glendon. All of the residences along Industrial Drive are connected to the public water system. It is believed that all the residences, upgradient of the site, in the Morgan Hill area rely upon private wells.

Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants

Contaminants detected in groundwater at the Industrial Lane site include the volatile organic compounds (VOCs) vinyl chloride and benzene from the former disposal activities. The health threat of concern at this site is the risk associated with potential exposure to hazardous substances in the groundwater through direct contact, accidental ingestion, or inhalation.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on providing a safe water supply and cleanup of the groundwater/source control.

Response Action Status

Water Supply: The State and the EPA conducted a water sampling program of private wells in the area and investigated the potential sources of groundwater contamination. In 1989, water service lines were installed from the existing street water supply mains to the 24 residences with contaminated or threatened wells.

Groundwater/Source Control: The EPA has completed an investigation into the nature and extent of the groundwater contamination at the site. The selected remedy for cleanup of the groundwater and the source of contamination is closure of the unlined municipal landfill, in accordance with State regulation, and remediation of groundwater to background levels. The design of the cleanup technologies is expected to begin in 1991.

Site Facts: The owners currently are operating under a State municipal landfill permit and are negotiating with the State for closure of a portion of the landfill and opening of a new area.

Environmental Progress

By supplying the residences having contaminated or potentially threatened wells in the Industrial Lane site area with a safe drinking water source, the EPA and the State have greatly reduced the potential for these residents to be exposed to hazardous materials while the design of the final cleanup remedy is taking place.

JACKS CREEK/SITKIN SMELTING & REFINING, INC.

PENNSYLVANIA

EPA ID# PAD980829493

EPA REGION 3
CONGRESSIONAL DIST. 09
Mifflin County
In Maitland

Other Names:
Sitkin Smelting Refining Inc.

Site Description

Operators smelted and refined scrap metal to make alloys such as brass on the 115-acre Jacks Creek/ Sitkin Smelting & Refining, Inc. site in Maitland, until the facility closed in 1977. The owners left behind approximately 143,000 tons of mill tailings (smelting wastes) containing lead and other heavy metals. These are stockpiled next to Jacks Creek. Bankrupted in 1977, Sitkin sold part of its property to Joseph Krentzman and Son, Inc. for a scrap yard, and the C.I.T. Corp. and the Alabama Bankruptcy Court own the remainder. In 1984, the EPA detected polychlorinated biphenyls (PCBs) in on-site soil and lead and PCBs in Jacks Creek, which is used for recreational activities. In 1985, Krentzman proposed to remove the PCB-contaminated soils and encapsulate them elsewhere on the site. The owner also planned to dismantle the smelters and to arrange for proper disposal. However, an agreement between this owner and the State was never reached. The Tonolowa Keyser, Old Port, and Onondaga Formations provide water to private wells that serve approximately 1,000 people living within 3 miles of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants

Preliminary sampling results indicate that lead from the former site operations may be present in on-site groundwater. On-site soil contains PCBs; the acidity of the soil enhances lead migration into the groundwater. Jacks Creek contains lead and PCBs. People using Jacks Creek for recreation could be exposed to chemicals in the water through accidental ingestion or direct contact.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Initial Actions: In 1991, the EPA built berms on the site to control the erosion of materials and to prevent contaminants from being washed into Jacks Creek. A liner also was placed on the mill tailings to contain waste left over from smelting operations.

Entire Site: An intensive investigation of on-site contamination began in 1990. This study is exploring the nature and extent of the problem and will identify the best strategies for final cleanup. It is scheduled for completion in 1993.

Site Facts: The parties potentially responsible for the site contamination submitted a proposal for cleanup to the State in 1985 to encapsulate and remove PCB-contaminated soils. However, no agreement was reached. General notice letters were sent out to four parties in May 1990, inviting them to participate in the site investigations and cleanup.

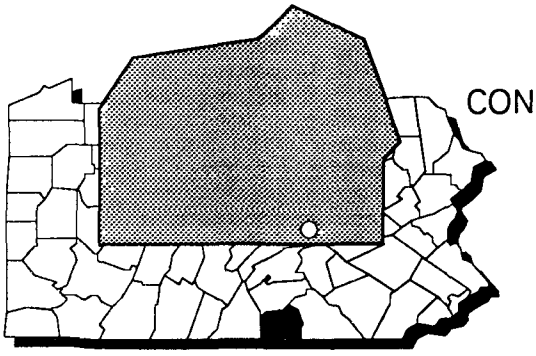
Environmental Progress

By building berms to control erosion and lining the tailings piles to contain contaminants, the EPA has reduced the immediate threats to the surrounding residents and the environment at the Jacks Creek/Sitkin Smelting & Refining, Inc. site while investigations leading to final cleanup activities take place.

KEYSTONE SANITATION LANDFILL

PENNSYLVANIA

EPA ID# PAD054142781



EPA REGION 3

CONGRESSIONAL DIST. 19

Adams County

Union Township

Site Description

The Keystone Sanitation Landfill site covers 40 acres on a former farm that began accepting municipal waste and industrial construction debris in 1966. The landfill site is situated on a ridge, and runoff leaves the area in all directions. Tests conducted by the EPA and the State show groundwater has been contaminated. The Pennsylvania Department of Environmental Resources (PADER) is monitoring the site, and the owner voluntarily has begun cleanup actions. Currently, groundwater is being pumped through one well to the surface, and contaminants are being removed through an aeration process. The population within a 3-mile radius of the site is approximately 2,300. An estimated 1,700 people draw drinking water from private wells or springs that tap the contaminated aquifer within 3 miles of the site. One resident is located on site. Others live approximately 200 yards from the site.

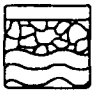
Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

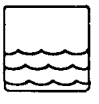
NPL LISTING HISTORY

Proposed Date: 04/01/85

Final Date: 07/01/87

Threats and Contaminants





Groundwater on site is contaminated with volatile organic compounds (VOCs) and heavy metals including chromium and lead from former waste disposal practices. Groundwater off site is contaminated with chromium, mercury, and VOCs including vinyl chloride and dichloroethylene. Surface water contains VOCs and heavy metals including mercury, cyanide, lead chromium, copper, and zinc. Accidentally ingesting or coming in direct contact with contaminated groundwater may present a health risk.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on cleanup of the entire site and off-site groundwater and surface water cleanup.

Response Action Status

Entire Site: Keystone completed a study of on-site groundwater contamination. In 1990, the EPA selected the remedy for cleanup of the site, which includes extraction and treatment of on-site groundwater, installation of an impermeable cap and a gas collection system to prevent the migration of wastes, construction of a fence to limit access to the site, and monitoring of the groundwater, surface water, and sediments. The design of the cleanup technologies is scheduled to begin in 1991.

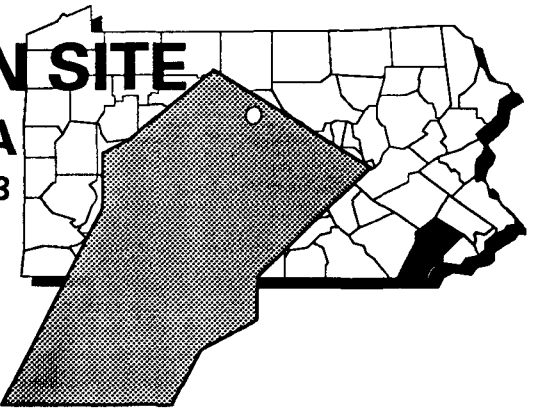
Off-Site Groundwater and Surface Water: In 1990, the EPA completed a study of off-site contamination of groundwater. Keystone is expected to continue investigating the nature and extent of off-site groundwater contamination in 1991. The study also will address concerns over off-site surface water contamination.

Site Facts: In 1987, Keystone signed a Consent Adjudication with the PADER, which requires Keystone to investigate and clean up the on-site groundwater contamination and the contaminated groundwater migrating off site. The state of Maryland also is monitoring the site, because it is close to the Maryland/Pennsylvania border.

Environmental Progress

After adding the Keystone Sanitation Landfill to the NPL, the EPA conducted an assessment of site conditions and determined that the site currently does not pose an immediate threat to the public or the environment. Once further investigations into the groundwater contamination and the selected remedies are reviewed, final cleanup activities will begin.

KIMBERTON SITE
PENNSYLVANIA
EPA ID # PAD980691703



REGION 3
CONGRESSIONAL DIST. 05
Chester County
Kimberton Borough, near Philadelphia

Other Names:
Monsey Products
Ciba-Geigy Corporation

Site Description

The Kimberton Site occupies a 1-acre area and encompasses the Monsey Products Company property and adjacent properties within the surrounding Village of Kimberton. Several buried lagoons are located on the site and are in close proximity to numerous private water supply wells. A previous owner operated eight lagoons at the site in which various residues from manufacturing operations were dumped from 1947 to 1959. During routine water quality testing in 1981, a private well on the site was found to be contaminated. The EPA's subsequent investigation indicated that not only was the groundwater contaminated, but also the soil and surface water. The lagoons were identified as a source of contamination at the site. Approximately 500 people live within a 1-mile radius of the site. The nearest residence is adjacent to the Kimberton Site. A small stream that crosses through the site is the discharge point for local groundwater. Less than 1 mile from the site is French Creek, a public recreation and fishing area.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants

Soils, sludge, and sediments were contaminated with volatile organic compounds (VOCs) including trichloroethylene (TCE) and dichloroethylene. Groundwater is contaminated with VOCs including TCE, dichloroethylene, and vinyl chloride. A tributary to French Creek is contaminated with VOCs. People who accidentally ingest or come in direct contact with contaminated groundwater, soil, sludge, or sediments may be at risk. The use of French Creek for recreation or consumption of locally caught contaminated fish may pose a health hazard.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at the water supply and groundwater and surface water cleanup.

Response Action Status

Immediate Actions: In 1984, Ciba-Geigy and Monsey excavated and removed contaminated soil and 57 drums. The excavated area was covered with soil and seeded to establish a vegetative cover.

Water Supply: In 1986, Ciba-Geigy and Monsey Products provided 25 residential and commercial locations with an alternate source of drinking water. In 1988, the EPA selected a remedy for groundwater contamination, which included continuing the alternate water supply as well as installing monitoring wells. The activated carbon systems have been in place since 1986 and are filtering contaminants from the wells' water. The potentially responsible parties are constructing an extension of the public water system to the affected residences, which is scheduled to be completed in mid-1991. The activated carbon systems will be dismantled once the public water system is extended to all affected residences.

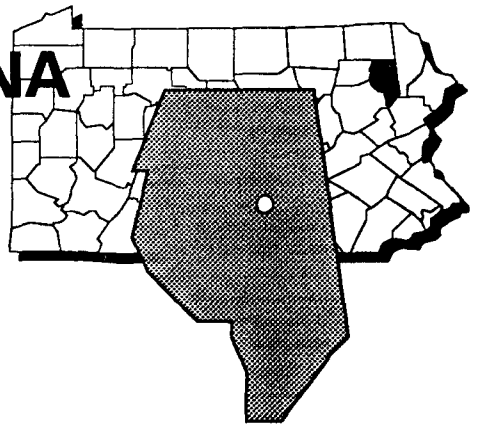
Groundwater and Surface Water: In 1989, the EPA selected a remedy for treating the contaminated groundwater and surface water, which includes pumping the water and then removing the contaminants by air stripping. The contaminants removed by the air stripper are further treated prior to releasing the air into the atmosphere. This treatment is expected to continue for 30 years. The potentially responsible parties are preparing the technical specifications and design for the cleanup. The design phase is expected to be completed in 1991, and at that time, the cleanup actions will begin.

Site Facts: In 1986, the State negotiated a Consent Order with the potentially responsible parties. This Order requires the parties to provide alternate water supplies to affected residences until a permanent water line can be constructed. Additionally, in 1987, the parties agreed to conduct a study to determine the type and extent of contamination at the site. The parties plan to install a permanent water line in 1991.

Environmental Progress

The excavation and disposal of contaminated soils and drums reduced the threat of further groundwater contamination. The provision of an alternate safe drinking water source and the operation of carbon treatment systems for the contaminated groundwater have reduced the potential for exposure to hazardous materials at the Kimberton Site while the construction of permanent water lines and the technical design of additional remedies take place.

LACKAWANNA REFUSE
PENNSYLVANIA
EPA ID # PAD980508667



EPA REGION 3
CONGRESSIONAL DIST. 10
Lackawanna County
Between the Borough of Old Forge and Ransom Township

Other Names:
Lackawana Refuse Removal Company, Inc.
Iacavazzi Landfill
Old Forge Landfill

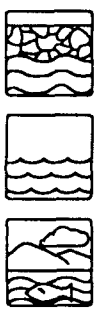
Site Description

The Lackawanna Refuse site consists of 258 acres and lies in an area previously used for deep mining and strip mining of coal. In 1973, the Pennsylvania Department of Environmental Resources (PADER) issued a permit for the disposal of municipal and commercial refuse in 3 strip-mine cuts covering approximately 18 acres. Two of the strip-mine cuts contained commercial and municipal refuse, and the third contained approximately 15,000 buried drums. Industrial wastes also were dumped along the site's access road, in a borehole pit, and in a small paint-disposal area. In 1977, the owner applied for an addendum to the permit for the disposal of sludge. Although the addendum was authorized in 1978, PADER suspended the solid waste disposal permit later that year, after discovering that on-site activities included the unauthorized disposal of industrial and hazardous wastes. In 1980, the EPA excavated 200 drums and sampled 18 others. Leachate flows from the site into an intermittent stream, drainage ditches, and nearby St. John's Creek, which flows into the Lackawanna River. The site is located in a rural area of Pennsylvania and is surrounded by residential, agricultural, and former strip-mining areas. Approximately 9,000 people live within a 1-mile radius of the site. The nearest residences are along the site's eastern border. Local residents obtain drinking water from a public system that takes water from reservoirs several miles north of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



On-site groundwater is contaminated with nitrate, heavy metals including arsenic and cadmium, and volatile organic compounds (VOCs) from disposal activities at the site. Off-site groundwater is contaminated with the pesticide dieldrin. Surface water on site is contaminated with boron, manganese, and methylene chloride. Fish are contaminated with polychlorinated biphenyls (PCBs), VOCs, and dieldrin. Rabbits are contaminated with heavy metals including lead and nickel and VOCs. People who accidentally ingest or come in direct contact with contaminated water and sediments may be at risk. In addition, eating rabbits and fish with bioaccumulated levels of contaminants may pose a health threat.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1983, the EPA installed a fence and an access gate around the pits. Warning signs also were posted around the site.

Entire Site: The remedies selected by the EPA in 1985 to clean up the source of the contamination include removing the drums and solid waste and excavating contaminated soil and disposing of the materials in an EPA-approved facility, covering the pits with synthetic material to prevent rainwater and surface water from coming into contact with buried wastes, and installing a system to collect leachate. All drums and solid waste have been removed, and approximately 40,000 cubic yards of contaminated soil were excavated and disposed of. The leachate collection system and the synthetic cover were installed in 1989. The final grading and seeding of the site were completed in 1990. When treatment of the leachate is finished, slated for 1991, all cleanup activities will be completed.

Site Facts: In 1983, the owners and operators of the site pleaded guilty to failing to notify EPA that hazardous substances were disposed of, paid a fine, and agreed to use the proceeds from any sale of the land to help finance cleanup at the site. Two other NPL sites, Taylor Borough and Lehigh Electric, the latter deleted from the NPL, are located within 3 miles of the Lackawanna Refuse site.

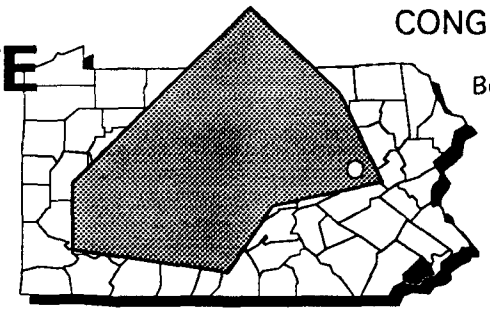
Environmental Progress

The numerous completed cleanup actions at the Lackawanna Refuse site have removed contaminated materials and have prevented the further spread of contamination. Once final actions are completed, the EPA will evaluate the site cleanup to ensure that the site no longer poses a threat to nearby residents or the surrounding environment.

LANSDOWNE RADIATION SITE

PENNSYLVANIA

EPA ID# PAD980830921



EPA REGION 3
CONGRESSIONAL DIST. 07
Delaware County
Borough of Lansdowne

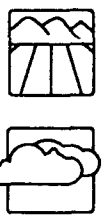
Site Description

The 1/2-acre Lansdowne Radiation site was a duplex housing structure, the basement of which was used as a laboratory by a chemistry/physics professor from 1924 to 1944. The laboratory was predominantly used to manufacture radium sources for medical radiation therapy. The duplex was contaminated with radium and other radionuclides. The radium contamination was detected in the soil surrounding the duplex structure and was presumed to have migrated onto properties bordering the duplex. A sewage line also was contaminated. There are approximately 11,000 people living within a mile of the site.

Site Responsibility: This site was addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 04/01/85
Final Date: 09/01/85

Threats and Contaminants



Radiation levels in the duplex exceeded Federal guidelines. Radioactive contamination had migrated to the sewer line from the duplex. Specific contaminants detected in soil surrounding the duplex included radium, radon gas, and radon decay products. Radioactive contamination had migrated to soil at the edge of the avenue where the duplex is located. Threats to human health included direct contact with radioactive materials. Air migration of contaminants also was of concern.

Cleanup Approach

The site was addressed in two stages: emergency actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Emergency Actions: In 1984, the EPA and the Federal Emergency Management Agency (FEMA) temporarily relocated residents of the duplex and most of their uncontaminated personal belongings. The EPA installed a fire and burglar alarm and a fire sprinkler system. The EPA shipped 289 truckloads of radiation-contaminated wastes for disposal in Utah. All threats to the nearby residents have been alleviated.

Entire Site: The final selection of cleanup technologies to address radiation contamination included dismantling of the duplex, packing and sealing of radioactive materials in approved containers and disposal at an approved facility off site, excavation and removal of contaminated soil located in and around the house, excavation of the sewer line and replacement of 243 feet of sewer line, and revegetation of the vacant property lot. The EPA completed these actions, and the site is slated for deletion from the NPL in 1991.

Site Facts: A notice of intent to delete the site was published in the *Federal Register* in March 1991.

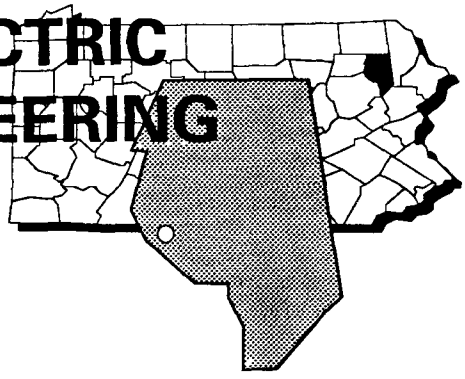
Environmental Progress

The Lansdowne Radiation Site has been dismantled and cleaned up within State and Federal guidelines, and all radioactive materials have been removed from the site. The area once again is safe for the surrounding population, and the site is in the process of deletion from the NPL.

LEHIGH ELECTRIC AND ENGINEERING COMPANY

PENNSYLVANIA

EPA ID# PAD980712731



EPA REGION 3
CONGRESSIONAL DIST. 10
Lackawanna County
Borough of Old Forge

Site Description

The 5 1/2-acre Lehigh Electric and Engineering Company site operated as part of a coal processing facility. From the mid-1970s until 1981, the site served as an electrical equipment repair and storage yard. About 4,000 transformers and capacitors were stored at the facility where indiscriminate handling and disposal of dielectric fluids containing polychlorinated biphenyls (PCBs) occurred. The Lackawanna River is located less than 1,000 feet downslope of the site. Contamination of the groundwater and the Lackawanna River was possible because the PCB-contaminated soil located on site is highly permeable, and the site is located in the river's flood plain. Groundwater is used for agricultural purposes, but no residents within a 3-mile radius of the site rely on groundwater as a source of drinking water. The site is adjacent to a residential area where approximately 150 people live.

Site Responsibility: This site was addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 03/07/86

Threats and Contaminants

Electrical equipment and debris on site were contaminated with PCBs. EPA investigations also revealed high concentrations of PCBs in on-site soil. Human health was threatened by ingestion, direct contact, and inhalation of PCB-contaminated soils and contact with PCB-contaminated equipment. There also was a risk associated with the ingestion of PCB-contaminated fish, game, or other biota.

Cleanup Approach

This site was addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: This site was cleaned up in two stages: Phase I involved the removal of transformers, transformer contents, and surface debris from the site; Phase II addressed the removal of contaminated soils and buildings from the site. In 1981, the EPA fenced the site and analyzed soil and water samples. In 1982, the EPA completed the removal of all surface equipment and debris. In 1984, the EPA completed the removal of PCB-contaminated soil, the excavation of additional soil, demolition of on-site buildings, backfilling, grading, and vegetating of the site. In 1986, the EPA deleted this site from the NPL.

Site Facts: Two other NPL Sites, Taylor Borough and Lackawanna Refuse, are located within 3 miles of the Lehigh Electric and Engineering company site.

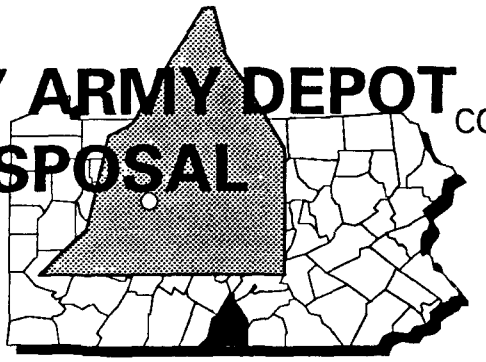
Environmental Progress

All cleanup activities have been completed at the Lehigh Electric and Engineering Company site. Contaminated soils, buildings, and debris have been removed and the site has been restored to safety levels. As a result of these cleanup activities, the EPA, in conjunction with the State has deleted the Lehigh Electric and Engineering Company facility from the NPL.

LETTERKENNY ARMY DEPOT (PROPERTY DISPOSAL OFFICE AREA)

PENNSYLVANIA

EPA ID# PA2210090054



EPA REGION 3

CONGRESSIONAL DIST. 09

Franklin County

2 miles north of Chambersburg

Other Names:
Property Disposal Office Area

Site Description

The Letterkenny Army Depot (Property Disposal Office Area) site covers 250 acres of the 19,520-acre facility north of Chambersburg. From 1947 to the present, operations at the site have included the maintenance, overhaul, and rebuilding of wheeled and tracked vehicles and missiles. These operations have involved the use of large quantities of chlorinated organic solvents and cleaning agents. Some wastes from these operations have been stored and disposed of in the Property Disposal Office (PDO) area by landfilling and spreading wastes on open ground areas. Other areas of suspected contamination are the drum storage area, oil burn pit, trash burning pits on the site, and possibly, adjacent landfills. An estimated 17,000 people reside within 5 miles of the site. No effects on residential or other areas located near the site have been reported, except for Rocky Spring Lake, which has not been used for recreational purposes since the discovery of contamination in 1983. However, fishing, swimming, and boating activities were taking place in the lake prior to 1983.

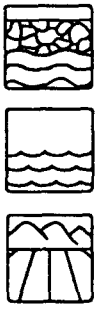
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 04/01/85

Final Date: 03/13/89

Threats and Contaminants



Groundwater beneath the PDO area and surface water, including Rocky Spring Lake, are contaminated with chlorinated organic chemicals including chloroform and trichloroethylene (TCE), according to tests conducted by the Army. Soils have been contaminated by xylene, heavy metals, chloroform, and organic compounds. No residential wells have been found to be contaminated by this site. Individuals may be at risk if they drink, come in direct contact with, or inhale vapors from the contaminated waters.

Cleanup Approach

The site is being addressed in three stages: two long-term remedial phases directed at cleanup of the drum storage revetments and of the groundwater.

Response Action Status

Initial Actions: In 1990, the Army cleaned up the fire training area based on contamination found during site studies.

Drum Storage Revetments: Measures are being taken by the Department of Defense (DoD) to select cleanup actions that will control the sources of contamination in this area. A comprehensive study to determine the extent of contamination and to identify alternative technologies at the site is underway. This study began in 1989 and includes an investigation of contamination at the drum storage area, oil burn pit, and trash burning pits. The study has been completed, and the proposed cleanup remedies and technologies will be evaluated to select the final cleanup strategy for site contamination.

Groundwater: A study is underway to characterize the level and extent of contamination of the groundwater. The investigation is scheduled for completion in 1992, at which time the final cleanup strategy will be selected.

Site Facts: On February 3, 1989, the EPA, the State, and the Army entered into an Interagency Agreement covering comprehensive cleanup and compliance activities at the base. The site is participating in the Installation Restoration Program a specially funded program established by the DoD in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities. The Southeast Area of the Letterkenny Army Depot is listed separately on the NPL.

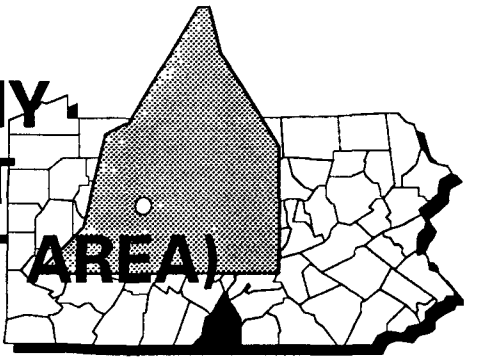
Environmental Progress

The Army is planning to accelerate the selection of the remedy to control the source of contamination at the drum storage revetments area. Investigations into the other areas of concern and the cleanup alternatives are currently taking place.

LETTERKENNY ARMY DEPOT (SOUTHEAST AREA)

PENNSYLVANIA

EPA ID# PA6213820503



EPA REGION 3

CONGRESSIONAL DIST. 09

Franklin County

2 miles north of Chambersburg

Other Names:
Letterkenny Army Depot (Lead)

Site Description

The Letterkenny Army Depot (Southeast Area) covers 170 acres of the 19,520 acres occupied by the military facility, which is located 2 miles north of Chambersburg. The site was established in 1942 as an ammunition storage facility. From 1947 to the present, operations at the site have included the maintenance, overhaul, and rebuilding of wheeled and tracked vehicles and missiles. These operations have taken place primarily in the southeastern corner of the depot known as the Southeast Industrial Area and in the East Patrol Road Disposal Area. The operations have employed large quantities of chlorinated organic solvents and cleaning agents. Wastes from the operations have been disposed of in the same areas by landfilling, by burying in trenches, and by spreading wastes on the surface. Approximately 17,000 people live within 5 miles of the site. Wells that supplied 44 homes located nearby are contaminated with wastes migrating from the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 07/01/87

Threats and Contaminants

Groundwater beneath the Southeast Industrial Area of the depot, as well as beneath an off-depot area of approximately 4,000 acres, extending at least 2 1/2 miles to the east of the depot, is contaminated with chlorinated organic chemicals. Soil has been found to be contaminated with chlorinated organic chemicals, including volatile organic compounds (VOCs). Individuals may be at risk if they accidentally ingest, inhale, or come in direct contact with contaminated groundwater or soil. Additional residential wells potentially could become contaminated.

Cleanup Approach

This site is being addressed in three stages: initial actions and two long-term remedial phases focusing on cleanup of the K areas and of the entire site.

Response Action Status

Initial Actions: The Army supplied 44 residences with bottled water and subsequently, from the summer of 1987 until 1989, connected the homes to the Guildford Water Authority public water system. The Army completed preliminary studies that resulted in closing the on-site waste lagoons under a closure plan to eliminate the source of contamination.

K Areas: A more complete study to determine the extent of contamination from the former drum storage area and to identify alternative technologies for the cleanup was started in 1989. Dye tracer studies were used to determine characteristics of the geology and groundwater movement under the site. The study was completed in 1990, and a decision on cleanup alternatives is expected in 1991.

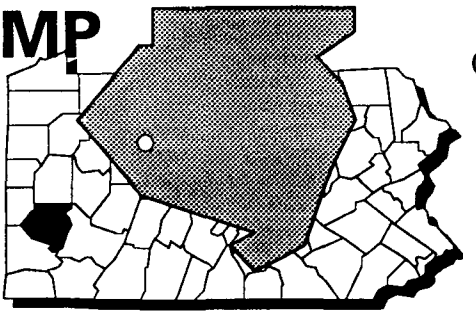
Entire Site: A second investigation was started in 1989 to study other possible disposal areas on site, which includes soil sampling and geophysical testing.

Site Facts: The Army, the EPA, and the State have entered into an Interagency Agreement that covers all cleanup activities at the site. Letterkenny Army Depot is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities. A portion of the Letterkenny Army Depot, referred to as the Property Disposal Office Area (PDO), also is listed on the NPL.

Environmental Progress

By supplying the affected residences with a safe alternate water supply and closing the waste lagoons, the Army has greatly reduced the potential for the nearby population to be exposed to the contamination sources. Further studies leading to the final selection of remedies for the other affected areas at the Letterkenny Army Depot (Southeast Area) are taking place.

LINDANE DUMP
PENNSYLVANIA
EPA ID# PAD980712798



EPA REGION 3
CONGRESSIONAL DIST. 20
Allegheny County
Harrison Township

Other Names:
Pennwalt Lindane Dump
Alsco Community Park

Site Description

The Lindane Dump site consists of a recreational park about 14-acres in size and a 43 1/2-acre lower project zone that includes a closed landfill area. About 400 tons of powdered lindane pesticide waste and other industrial waste were dumped at the site from 1900 to 1950. Industrial waste dumping continued after the sale of the property in 1965. In 1976, a portion of the site was donated by the owner to Harrison Township for use as a park area. In 1984, the park was closed due to site contamination and Pennwalt, one of the parties potentially responsible for the site contamination, assumed responsibility of the site. There are approximately 13,000 people living within a mile of the site. Residents near the site obtain water from a municipal system that draws water from the Allegheny River.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants

Continuous leaching of pesticide residues from the landfill is contaminating the groundwater and surrounding soil. Accidentally ingesting or coming in direct contact with contaminated groundwater, soil, or leachate can pose health risks.

Cleanup Approach

This site is being addressed in two stages: an initial action and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Action: A leachate treatment system has been installed and activated to control the spread of pesticide residues.

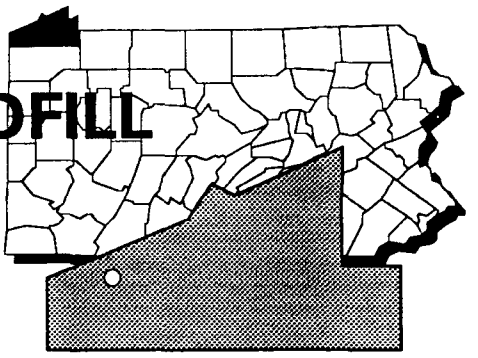
Entire Site: The State and the potentially responsible parties currently are conducting an investigation into the nature and extent of contamination at the site. The investigation will define the contaminants and will recommend alternatives for the final cleanup. Field work is completed, and a proposed plan for cleanup is expected to be issued in late 1991, with a final decision on site cleanup planned for 1992.

Site Facts: In 1983, the State and Pennwalt, a potentially responsible party, agreed to conduct a leachate treatability study to evaluate short- and long-term treatment and disposal alternatives.

Environmental Progress

The leachate treatment system has reduced the further spread of contaminated materials from the Lindane Dump site while the State and the potentially responsible parties continue conducting intensive studies, which will lead to the selection of a final cleanup remedy.

LORD-SHOPE LANDFILL
PENNSYLVANIA
EPA ID# PAD980508931



EPA REGION 3
CONGRESSIONAL DIST. 21
Erie County
17 miles west of Erie

Other Names:
Shope Melvin Property

Site Description

An estimated 4 million cubic feet of waste were disposed of on the privately owned 5-acre Lord-Shope Landfill site between 1959 and 1979. Wastes deposited on the landfill site consisted principally of debris, but included rubber scrap, organic and inorganic chemicals, solvents, cooling oils, acids, and caustic agents. Land use in the immediate vicinity includes agricultural areas, a golf course, orchards, vineyards, and wooded areas. The nearest residences are situated several hundred feet from the site. Approximately 125 people reside within a mile of the site, and about 5,700 people live within 3 miles of the contamination area. Elk Creek, into which site runoff discharges, has a water intake located approximately 4,800 feet downstream of the contamination area. The water from this intake is used to irrigate food crops.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants

Due to the spillage or disposal of liquid wastes, the soils and landfill materials are contaminated. Leaching of contaminants has caused pollution of the groundwater with volatile organic compounds (VOCs) and various heavy metals including lead. Sediments of a nearby stream are contaminated with low-level VOCs, barium, and arsenic. Arsenic and copper have been identified in off-site surface water, although not at significant levels. Long-term risks are posed by the potential for consumption of contaminated groundwater. Currently, there are no drinking water wells in the area of contamination. Direct contact with landfill materials and soil is limited by the cap and revegetation.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1983, a party potentially responsible for the site contamination removed exposed drums, placed 20,000 gallons of leachate into drums and removed them, regraded and capped the landfill with a polyvinyl chloride (PVC) liner, and installed a subsurface slurry wall to divert groundwater from coming in contact with contaminated materials in the landfill.

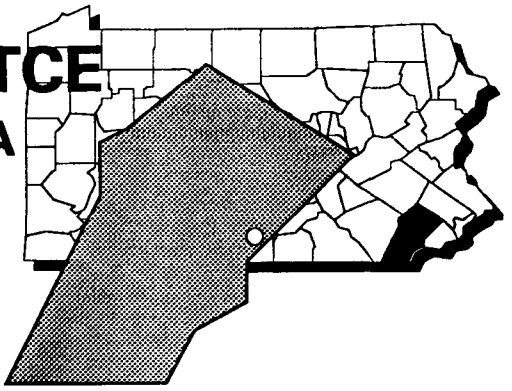
Entire Site: In 1990, the EPA selected the remedy for cleanup of the entire site, which includes removal of VOCs from landfill materials and surrounding soils through in-situ vapor stripping, extraction and treatment of contaminated groundwater by pre-treatment of iron and other metals and air stripping for removal of VOCs, and discharge of treated groundwater to a nearby tributary of Elk Creek. The design of the cleanup technologies is scheduled to begin in 1991.

Site Facts: A Consent Order was signed in 1982 between the potentially responsible parties and the Pennsylvania Department of Environmental Resources (PADER) to perform some immediate cleanup actions at the site. A second Consent Order was signed in 1987, under which the potentially responsible parties were required to conduct studies at the site.

Environmental Progress

The removal of hazardous materials and drums and regrading and capping of the landfill have eliminated the immediate sources of exposure to contamination, making the Lord-Shope Landfill safer while cleanup activities are being conducted.

MALVERN TCE
PENNSYLVANIA
EPA ID# PAD014353445



EPA REGION 3
CONGRESSIONAL DIST. 05
Chester County
Malvern

Other Names:
Chemclene Corporation

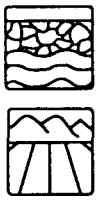
Site Description

The Malvern TCE site covers 2 acres in a wooded area and operates as a solvent reclamation facility. This site is a federally regulated hazardous waste facility. From 1952 to 1976, drums containing various wastes were dumped into pits on the site. Two drum disposal areas were found to contain approximately 300 drums. There are approximately 14,000 people living within a 3-mile radius of the site. The nearest residence is 350 feet away. There are 30 homes that draw drinking water from the contaminated groundwater.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



The groundwater is contaminated with trichloroethylene (TCE) from past drum disposal practices. Soil is contaminated with polychlorinated biphenyls (PCBs). People who accidentally ingest or come in direct contact with contaminated groundwater may be at risk.

Cleanup Approach

The site is being addressed in two stages: immediate actions and long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: All the buried drums and some of the contaminated soil have been removed. The owner of the site provided carbon filters to residences with contaminated wells and fenced the pits.

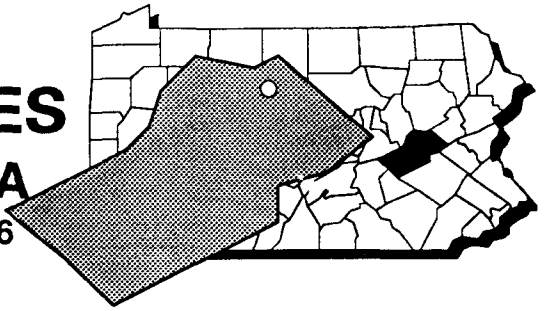
Entire Site: Chemclene, the potentially responsible party, is studying the type and extent of contamination at the site. The study, planned for completion in 1991, will provide alternatives for the cleanup. Since the facility is a Resource Conservation and Recovery Act (RCRA)-regulated facility, RCRA enforcement is now handling the site. Because the investigation of the facility will be conducted under RCRA corrective action, the EPA will initiate procedures to remove the site from the NPL.

Site Facts: In December 1988, the EPA and Chemclene signed a Consent Order, in which Chemclene agreed to conduct a study and to clean up the site.

Environmental Progress

After adding the Malvern TCE site to the NPL, the EPA performed a preliminary evaluation and determined that, as a result of the early actions to remove contaminated drums and soil and provide water filtration to affected residents, no other immediate actions were required to reduce the potential for exposure to hazardous materials while the investigation leading to the selection of a final cleanup remedy for the site is taking place.

MCADOO ASSOCIATES
PENNSYLVANIA
EPA ID# PAD980712616



EPA REGION 3
CONGRESSIONAL DIST. 06
Schuylkill County
Borough of McAdoo and
Kline Township

Other Names:
McAdoo Associates and E. L. Player

Site Description

The McAdoo Associates site consists of two areas approximately 1 1/3 miles apart. One area, in the Borough of McAdoo, covers about 1/5 of an acre. The other, in Kline Township, covers 8 acres. From 1884 until 1969, the site was mined for anthracite coal. In 1975, the property was acquired by McAdoo Associates. Wastes were stored at these sites from 1978 until 1979, when the State revoked McAdoo's permit to operate. At that time, the McAdoo Borough facility had five underground storage tanks that contained hazardous substances. The Kline Township area, used as a metal reclamation and incineration facility, consisted of approximately 7,000 drums and six aboveground tanks. Approximately 5,100 people live within a 1-mile radius of the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants

The soil is contaminated with heavy metals and low levels of various volatile organic compounds (VOCs) from the former waste storage practices. People who come into direct contact with contaminated soils may be at risk.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and groundwater and off-site surface water cleanup.

Response Action Status

Immediate Actions: In 1980, the site owner removed the incinerator, the buildings, and three temporary underground storage tanks and sampled the soil. In 1982, the owner removed all surface wastes and visibly contaminated soil to a federally regulated off-site facility. Between 1988 and 1989, the last remaining tank and surface debris were removed. Soil sampling and a mine subsidence study also were conducted.

Entire Site: In 1985, the EPA chose a remedy to clean up the site, which included: removing all surface tanks; excavating contaminated soil, then backfilling the excavated area with clean topsoil; and constructing diversion ditches to prevent off-site surface water from draining into the site. Once the excavation is completed, the potentially responsible parties will backfill the area with clean material, and the site will be capped. Cleanup activities at the site started in 1988, with all work scheduled to be completed in 1991.

Groundwater and Off-Site Surface Water: In 1990, the EPA began an investigation into the nature and extent of any contamination in the groundwater or off-site surface water. The study is scheduled to be completed in 1991.

Site Facts: In 1988, the EPA, the Commonwealth of Pennsylvania, and the potentially responsible parties signed a Consent Decree, under which the parties agreed to clean up the site.

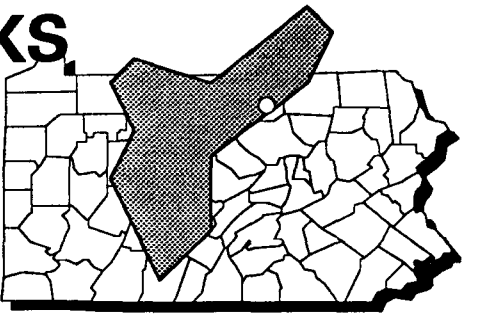
Environmental Progress

The initial removal of contaminated materials and soil reduced the potential for exposure to hazardous materials at the McAdoo Associates site, while ongoing investigations and cleanup activities address the remaining contamination areas and restore the site to safety levels.

METAL BANKS

PENNSYLVANIA

EPA ID# PAD046557096



EPA REGION 3

CONGRESSIONAL DIST. 03

Philadelphia County
Philadelphia, next to the
Delaware River

Other Names:
Cottman Avenue Site

Site Description

The Metal Banks site occupies 6 acres next to the Delaware River in an industrial section of Philadelphia. From 1968 to 1972, Metal Bank of America, Inc. drained oil contaminated with polychlorinated biphenyls (PCB) from used transformers to reclaim copper parts. When the U.S. Coast Guard traced periodic oil slicks in the river to the site in 1972, the company carried out cleanup activities to prevent oil releases; however, oil containing PCBs again seeped from the site in 1977. A 1978 study by the Coast Guard revealed that up to 20,000 gallons of PCB-contaminated oil lay in groundwater under the site and was leaking into the Delaware River. Oil was in one underground tank that had ruptured and leaked. The tank was drained, cleaned, and filled with concrete in 1981. Two million people living within 3 miles of the site are supplied with drinking water from either the Delaware river via a public water supply system or groundwater sources via private wells. The nearest residence is 200 feet away, and the nearest well is 2 miles from the site.

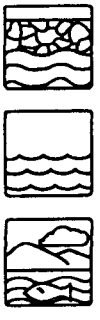
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



PCB-contaminated oil from former disposal practices has penetrated to the groundwater under the site. PCB-contaminated oil is seeping into the Delaware River via the groundwater. Recreational boaters may be at risk from direct contact with contaminated surface water and sediments. Recreational fisherman may be at risk from consuming contaminated fish. Wetlands may be affected by PCBs seeping from the site area.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: Under EPA orders, the owner began recovering contaminated oil from the groundwater in 1981; the process was completed in 1989, although oil remains in the subsurface. The remaining oil is not recoverable using the previously approved pump and treat system.

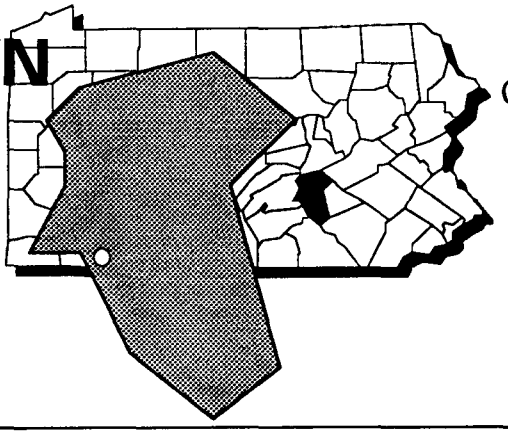
Entire Site: Further study of contamination at the site will be conducted by some of the potentially responsible parties. The investigation, which will explore the nature and extent of site problems and recommend strategies for final cleanup has begun and is expected to be completed in 1993.

Site Facts: The EPA sued Metal Bank of America for cleanup in 1980, and the company began recovering the oil-contaminated groundwater in 1981. After the EPA sued the owner, Metal Bank and the EPA entered into a 1983 agreement requiring that the company install and maintain a groundwater recovery system. By 1988, the EPA identified 20 additional potentially responsible parties. In December 1988, litigation commenced regarding Metal Bank's claim that the 1983 stipulation requirements had been met, thus ending the company's liability at the site. The EPA did not concur with this finding and in November 1989, the court ruled in favor of the EPA. In May 1991, the EPA and 10 potentially responsible parties signed an Administrative Consent Order requiring the parties to perform investigations at the site. Metal Bank chose not to join the group signing the Consent Order.

Environmental Progress

The process used to pump and treat the oil-contaminated groundwater, although not entirely effective, is helping to reduce the levels of contamination (it has collected approximately 4,200 gallons of PCB-contaminated oil) while studies are underway to identify a permanent treatment alternative for the Metal Banks site.

MIDDLETOWN AIR FIELD
PENNSYLVANIA
EPA ID# PAD980538763



EPA REGION 3
CONGRESSIONAL DIST. 16
Dauphin County
8 miles southeast of Harrisburg

Other Names:
Olmstead Air Force Base
Harrisburg International Airport

Site Description

Until 1966, the Federal Government owned and operated the Middletown Air Field as the Olmstead Air Force Base. The site encompasses approximately 200 acres between Middletown and Highspire. Aircraft workers generated solvent and other industrial wastes while maintaining, overhauling, and testing aircraft. They disposed of some of these wastes on the site. Now privately and Commonwealth-owned, the property houses Harrisburg International Airport, the Mead Heights area, and several industrial properties. The site lies next to the Susquehanna River and near Swatara Creek. In 1983, discovery of volatile organic compound (VOC)-contamination in 2 of 10 water supply wells resulted in their closure. A water treatment system was installed by the Pennsylvania Department of Transportation and the U.S. Air Force, under an agreement with the EPA. This action has returned all of the wells to potable use. The site is located in a mixed residential and industrial area. The water supply on the site provides water to about 3,500 full-time users, as well as to airline travelers and industrial users. Approximately 19,500 people obtain drinking water from wells within 3 miles of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants

Wells, groundwater, and soils are contaminated with VOCs including trichloroethylene (TCE) and heavy metals, such as lead. Drinking contaminated groundwater could pose a threat, although this threat virtually has been eliminated by groundwater treatment. Accidental ingestion of or direct contact with contaminated soil also pose health risks.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on groundwater cleanup and source control.

Response Action Status

Immediate Actions: In 1984, the State removed all sludge and liquids in the waste distribution building, closed the fire training pits, and removed all contaminated materials from the location. The same year, the Air Force removed some waste drums from the Mead Heights area.

Groundwater: In 1987, the EPA selected a remedy for cleaning up groundwater supplied by the Harrisburg International Airport system. It features: (1) providing a potable water supply; (2) building a central treatment plant; (3) pumping groundwater and air stripping it of contaminants by exposing it to air; and (4) monitoring groundwater. These cleanup activities were conducted by the potentially responsible parties. Construction of the groundwater pumping and treating system was completed in 1990.

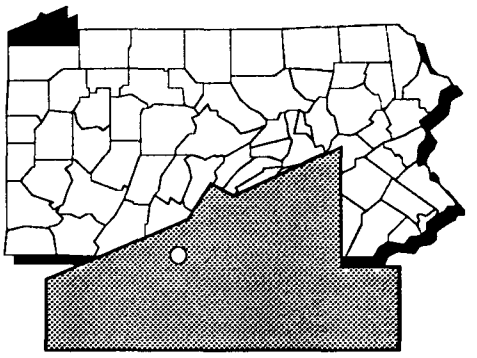
Source Control: Three disposal areas have been identified as possible sources of groundwater contamination at the site. The EPA began an intensive study of these areas in early 1988, exploring the nature and extent of the problem at each area. The investigation, was completed in 1990. EPA proposed a plan to control the source of contamination through deed and land use restrictions, monthly groundwater monitoring, and further investigations.

Site Facts: The Air Force is cooperating with the EPA under the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities.

Environmental Progress

The immediate removal of contaminated materials and the closing of the fire training pits at the Middletown Air Field, as well as the treatment of contaminated wells to ensure a safe drinking water source, have made the site safer while final cleanup remedies are being planned.

MILL CREEK DUMP
PENNSYLVANIA
EPA ID# PAD980231690



EPA REGION 3
CONGRESSIONAL DIST. 21
Erie County
Millcreek Township,
2 miles west of Erie

Other Names:
Fuchs Landfill
Harbor Drive Dump

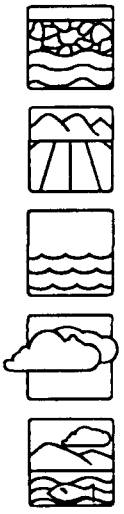
Site Description

Mill Creek Dump is an 84 1/2-acre site comprised of a former freshwater wetland that was used as a dump for foundry sands, solvents, bulk liquids, and other industrial and municipal wastes. Over a period of 40 years, all but 4 acres of the marsh were filled. For a time, the operators reclaimed metals from foundry sands and excavated a deep pond to supply the wash water. The site includes four adjacent parcels of land, each with a separate owner. The site is flat and partially wooded and includes a portion of Marshall's Run, as well as the former wetland. Junk vehicles, leveled buildings, and abandoned machinery are scattered on the surface. The surrounding area is commercial and residential. An estimated 2,000 people work or live within 2,500 feet of the site. Nearby are a State Park, an airport, and woodlands. Hunters and children have been observed on the landfill.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants



Groundwater is contaminated with volatile organic compounds (VOCs) from the former waste disposal practices. Soil and sediments contain high levels of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and heavy metals. Coming in direct contact with, inhaling, or ingesting contaminated materials present a health risk. The nearby contaminated wetland lies within flood plains. Contaminated groundwater, soils, sediments, and surface water drain into Lake Erie.

Cleanup Approach

The site is being addressed in two stages: initial actions and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: In 1983, the EPA undertook these cleanup actions at the site: (1) built fences and gates across access roads; (2) demolished sheds on site; (3) crushed 600 clean, empty drums and sent them to a metals recycling facility; (4) removed 100 drums of hazardous liquids, 70 to be landfilled and 30 to be incinerated at EPA-approved facilities; and (5) stored 364 drums filled with non-hazardous material in the northeast corner of the site. In 1986, the EPA also put up 1,820 feet of wire-mesh fence in eight locations, installed a gate, and posted warning signs.

Entire Site: In 1986, the EPA selected a remedy for the site that features: (1) excavating contaminated soil and consolidating it under a cap to keep rainfall and runoff from spreading pollution; (2) covering remaining low-level contaminated soil with clean soil; (3) building retention ponds for managing surface and flood waters; (4) planting the soil cover and cap; (5) installing additional monitoring wells; and (6) pumping and treating the groundwater. Construction of groundwater collection trenches began in 1990. Construction of the groundwater treatment system began in early 1991. Design of a soil cap began in early 1991, and construction of the soil cap is targeted for spring of 1992.

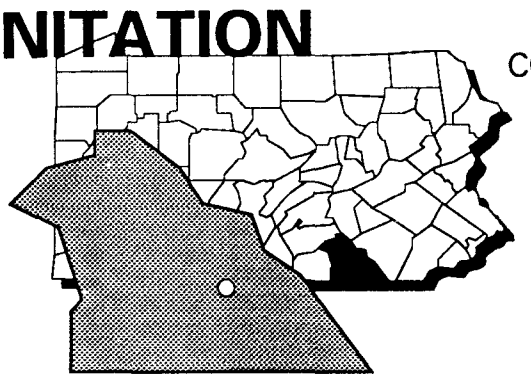
Environmental Progress

The numerous initial actions taken at the Mill Creek Dump site by the EPA, such as fencing and removing hazardous substances, have reduced the potential for exposure to contaminants at the site. Cleanup actions are well underway and will ultimately reduce the contaminants at the site to safety levels.

MODERN SANITATION LANDFILL

PENNSYLVANIA

EPA ID# PAD980539068



EPA REGION 3

CONGRESSIONAL DIST. 19

York County

York

Other Names:
Modern Sanitation

Site Description

The 72-acre Modern Sanitation Landfill site once was a farm that was used as a landfill for open domestic dumping since the 1940s and reportedly had received hazardous wastes between 1976 and 1979. The EPA and the State performed tests that indicated contamination from toxic organic chemicals in the groundwater under the site. Similar contaminants have been detected in springs adjacent to the landfill and in some private wells near the site. The current operator and the State are working on cleanup strategies for collecting and treating the contaminated groundwater on the western edge of the landfill. Between 1,000 and 3,000 people draw drinking water from wells within 3 miles of the site. The nearest residence is 10 feet from the site; 800 people live within 1 mile and 2,400 within 3 miles of the site. There are 273 wells within 1 mile; the nearest well is 1/2 mile away.

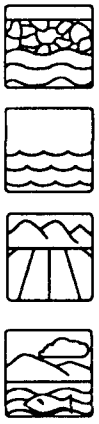
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



The groundwater, surface water, and soils are contaminated with volatile organic compounds (VOCs) including benzene and chloroform from poor disposal practices at the landfill. Private wells contain site-related contaminants. People who accidentally ingest or come into direct contact with contaminated groundwater, surface water or soil may be at risk. A drainage ditch into Kreutz Creek receives the outfall from an active leachate and groundwater treatment system on the site. The creek is stocked seasonally with trout. The possibility exists of the bioaccumulation of contaminants in fish, livestock, and crops. Groundwater and surface water are used to irrigate crops and provide water to grazing livestock.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

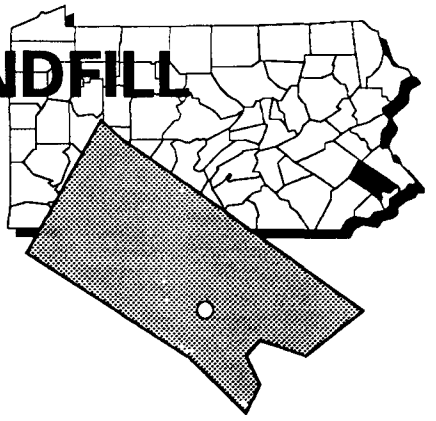
Immediate Actions: Owners of contaminated wells near the site currently are using an alternate water supply. A leachate collection system, which is designed to divert groundwater to an on-site treatment system, was put on the site. The system was redesigned and currently is active and collecting leachate. Groundwater extraction wells remove contaminated groundwater from the site. The groundwater is treated on site and discharged to a tributary of Kreutz Creek. Further analysis will determine the ultimate effectiveness of the system and whether additional actions are required to address contaminated leachate.

Entire Site: Under a State order, Waste Management, Inc. is conducting an intensive study of contamination at the site. The study will also recommend the best strategies for final cleanup and is scheduled to be completed in 1991. At this time, the EPA will review the findings of the site investigations and select a final cleanup strategy for the site. Waste Management also is slated to undertake design and cleanup actions scheduled to begin in 1992, including capping the site and continuation of the groundwater and leachate treatment systems.

Environmental Progress

The initial actions described above have provided a safe water supply to affected residents and have limited contamination migration from the site. The EPA has determined that the Modern Sanitation Landfill site currently does not pose an immediate threat to the nearby residents or the environment as additional studies are undertaken to identify site contamination and cleanup options.

MOYERS LANDFILL
PENNSYLVANIA
EPA ID# PAD980508766



EPA REGION 3
CONGRESSIONAL DIST. 05
Montgomery County
In Collegeville, near Eagleville

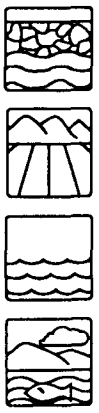
Site Description

From 1940 to 1981, the 44-acre Moyers Landfill accepted an unknown quantity of municipal, sewage, and industrial wastes. Solid and liquid hazardous wastes thought to have included polychlorinated biphenyls (PCBs), solvents, paints, low-level radioactive wastes, and incinerated materials were disposed of at the landfill site. The State closed the landfill in 1981, and it was brought into receivership of the U.S. District Court. Skipjack Creek, which was contaminated from site activities, and other small tributaries drain the site. Leachate overflows continuously from several collection pits located on the property. Soil was placed over the landfill and, following closure, additional cover soil was spread over the landfill. The waste mound also was reshaped to improve drainage; however, erosion exposed waste materials in some areas. Groundwater discharges from the downgradient "toe" of the landfill and along the steep slope beyond the landfill. The area is agricultural and residential. Evansburg State Park borders the site, and large residential developments lie within 1 mile. The distance to the nearest residence and well is approximately 300 feet. Approximately 760 people live within a mile of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



On- and off-site groundwater, leachates, and soil are contaminated with heavy metals and volatile organic compounds (VOCs) from former waste disposal practices. The surface water is polluted with VOCs. PCBs have been found in the trout in the surrounding streams. Leachate and affected sediments contain substantial levels of contaminants and therefore may pose risks to individuals who accidentally ingest, inhale, or come into direct contact with them. Drinking contaminated groundwater or consuming contaminated trout also may pose significant threats.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: In 1985, the EPA selected a remedy for controlling the source of the pollution. It includes: (1) grading and leveling the site; (2) constructing retaining walls at highly erodable areas; (3) capping the site with a low-permeability soil; (4) installing a gas vent system that prevents accumulating gas from rupturing the cap; (5) collecting surface runoff and discharging it directly into the creek; (6) installing a leachate collection and removal system; (7) treating collected leachate and discharging it into the creek; and (8) continuing to monitor groundwater and surface waters. The engineering design for the cleanup remedy, undertaken by the Army Corps of Engineers, was completed in 1989. Cleanup activities also began in 1989, and final cleanup is slated to conclude in 1993.

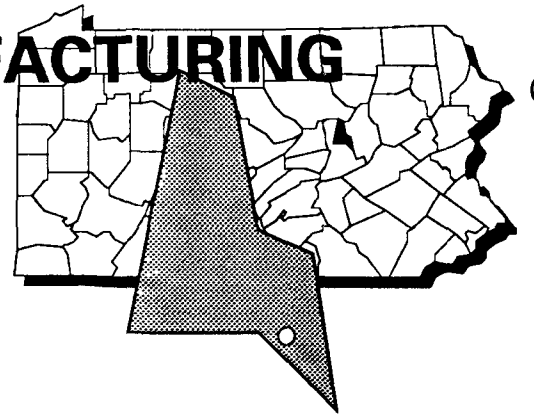
Environmental Progress

After adding this site to the NPL, the EPA assessed conditions at the Moyers Landfill and determined that no immediate actions presently were needed while cleanup activities are underway.

MW MANUFACTURING

PENNSYLVANIA

EPA ID# PAD980691372



EPA REGION 3

CONGRESSIONAL DIST. 11

Montour County
Valley Township, 2 miles north of Danville

Other Names:
Domino Salvage Yard
Domino Salvage—Warehouse #81

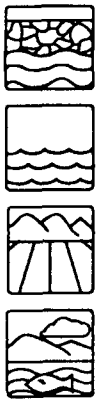
Site Description

The 15-acre MW Manufacturing site was a recovery operation for scrap wire, but currently does not operate in that capacity. The main building is being used as a storage facility, and a smaller building is occupied by a metal fabrication operation, unrelated to present or former site owners. The recovery process, which broke the polyvinyl chloride (PVC) insulation around the wire into granular black carbon, also helped dissolve heavy metals like lead, zinc, and copper into the waste materials. Workers then treated the freed copper wire with chlorinated solvents. The spent solvent apparently was dumped on the site. MW Manufacturing, the first owner, used both mechanical and chemical processes and went bankrupt in the early 1970s. The current owner, Warehouse 81, Inc., used a mechanical process. Waste accumulation on the site consists of an 86,000-gallon surface impoundment, 32,000 cubic yards of finely divided scrap wire called "fluff," a buried underground tank, and 13,000 cubic yards of contaminated soil. While the mechanical process generated the most fluff, the chemical processes were responsible for the biggest environmental impact. The area is agricultural and residential. Within a mile of the site are homes, motels, gas stations, restaurants, and a school. About 5,200 people live within a 3-mile radius; 1,500 live within 1 mile. Area residents use groundwater wells for drinking; about 320 wells lie within 3 miles of the site. Mauses Creek, a trout stream, flows to the south of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants



The groundwater, sediments, surface water, and soil are contaminated with various volatile organic compounds (VOCs). The groundwater also is contaminated with heavy metals including lead. Possible health risks include direct contact with the carbon waste pile, inhaling contaminated dusts or VOCs from the waste pile, or accidentally ingesting the contaminated groundwater. Trout in Mauses Creek also are threatened by site contaminants.

Cleanup Approach

This site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the groundwater, the carbon waste pile, and the "fluff pile."

Response Action Status

Immediate Actions: The EPA fenced the site and, as a precaution, temporarily provided bottled drinking water to a local school in 1985. When additional sampling confirmed that the well was not contaminated, the supply of bottled water was discontinued.

Groundwater: A study is underway to characterize the nature and extent of groundwater contamination. It is scheduled for completion in 1992, at which time, final cleanup remedy will be selected.

Carbon Waste Pile: The EPA considered the cleanup of this contamination source to be of primary urgency. In 1990, the carbon waste pile was excavated and incinerated at an off-site incinerator. Approximately 300 drums of carbon wastes contaminated with PCBs remain on site and will be incinerated as soon as arrangements can be made.

"Fluff Pile": In 1990, the EPA selected a remedy for the cleanup of the fluff pile, which entails excavation of the fluff pile wastes and underlying soils, on-site burning of the wastes and soils, and disposing of the incinerator ash in an EPA-approved hazardous landfill. Engineering designs began in 1990, and cleanup activities are slated to begin in 1992.

Site Facts: The State has investigated the site since the late 1960s and has issued orders for cleanup since 1971. At present, there is a Consent Order to clean up the site. The present owner, Warehouse 81 Ltd. Partnership, has removed and disposed of some of the hazardous waste and has processed some of the fluff.

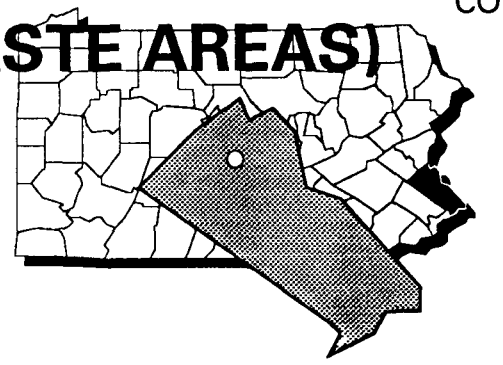
Environmental Progress

By fencing the site and providing bottled water to local students, the EPA reduced the threat of exposure to contaminants from the MW Manufacturing site while investigations were being completed. Studies of the groundwater contamination at the site are now underway, and cleanup activities will bring contamination levels at this site to acceptable levels.

NAVAL AIR DEVELOPMENT CENTER (8 WASTE AREAS)

PENNSYLVANIA

EPA ID# PA6170024545



EPA REGION 3
CONGRESSIONAL DIST. 08
Bucks County
Warminster

Site Description

The Naval Air Development Center (8 Waste Areas) site covers 734 acres in Warminster. Commissioned in 1944, its main mission is research, development, testing, and evaluation for naval aircraft systems. The Naval Air Development Center (NADC) also conducts studies in anti-submarine warfare systems and software development. Wastes are generated during aircraft maintenance and repair, pest control, firefighting training, machine and plating shop operations, spray painting, and various materials research and testing activities in laboratories. These wastes include paints, solvents, sludges from industrial wastewater treatment, and waste oils. The main areas of concern at NADC are eight waste areas covering more than 2 acres. The nearest population center involves the residents living on the base. The closest civilian home is about 200 feet from the base. The waste areas potentially affect the Stockton Formation Aquifer, which provides water for more than 100,000 people within 3 miles of the site. Local surface water bodies are used for recreation and industrial purposes. All surface waters run to the Delaware River.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 06/01/86
Final Date: 10/04/89

Threats and Contaminants

The EPA found the groundwater to be contaminated with volatile organic compounds (VOCs) including methylene chloride and toluene. The soil also is contaminated with VOCs, petrochemicals (such as chrysene and fluorine), and petrochemical sludges, lead, and waste oils. Nearby residents risk exposure through direct contact with contaminated soil and groundwater. Residential wells sampled in 1984 showed the presence of some VOCs, but these were not detected when the wells were resampled later that year. People using the unpaved road on site could be exposed to contaminants through accidental ingestion or direct contact with soils or waste or through inhaling contaminated air.

Cleanup Approach

The site is being addressed in eight long-term remedial phases focusing on cleanup of the Waste Burn Pit and seven other waste areas of the site.

Response Action Status

Waste Burn Pit: Soil samples, groundwater samples, electromagnetic surveys, and soil gas surveys were done to determine the extent of contamination at the waste burn pit. The Navy is conducting an intensive study of this area in two separate phases: Phase I is identifying the need for immediate action, confirming site boundaries, and adding to the hydrogeologic database; Phase II determines the type and extent of groundwater and surface water contamination, evaluates groundwater flow, and ascertains possible remedial alternatives. The investigations will explore the nature and extent of contaminants and will pinpoint the most effective strategies for cleanup. The study for the first phase began in 1989 and has been completed. The Phase II study has begun and is expected to be completed in 1991. Based on the results of these studies, a final cleanup remedy will be selected.

Other Waste Areas: Similar actions are planned for the seven remaining contamination areas at the NADC site, including two sludge disposal pit areas, landfills located north and south of the runway, additional waste burn and disposal pits, and the fire training area. The investigations will entail mapping VOCs in soil gas and studies of electromagnetic conductivity and metallic anomalies to detect metal contamination areas. Approximate site boundaries will be identified and confirmation of site contamination will be made through soil borings, installation of new overburden and shallow bedrock monitoring wells, groundwater sampling and analysis, and surface water and sediment monitoring. In addition, the Navy intends to sample air quality in base housing and buildings adjacent to several contamination areas and will evaluate the potential for releases of contaminated air. Investigations at all areas now are underway.

Site Facts: In 1989, the EPA submitted a draft Interagency Agreement to the Navy for formalizing and scheduling remedial activities. Regional EPA and Navy officials are negotiating its contents. NADC is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities.

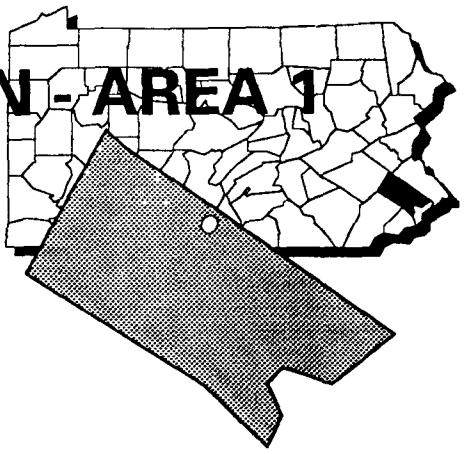
Environmental Progress

After adding the USN Naval Air Development Center site to the NPL, preliminary evaluations were performed, which showed that the site does not pose an immediate threat to the public or the environment while studies leading to the selection of a final remedy are taking place.

NORTH PENN - AREA 1

PENNSYLVANIA

EPA ID# PAD096834494



EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County
Souderton

Other Names:
Gentle Cleaners
Granite Hosiery Mills, Inc.
Granite Knitting Mills, Inc.

Site Description

The North Penn-Area 1 site is one of six NPL sites that involve the North Penn Water Authority (NPWA) wells supplying drinking water to people living northwest of Philadelphia. Originally listed under their individual names, each of these site has been assigned an "Area" number under the name "North Penn." Gentle Cleaners, Inc., one of the parties potentially responsible for the site contamination, has been in business since 1953. The firm used perchloroethylene (PCE) from 1953 to 1983 in dry cleaning operations, and then changed its processes to use a combination of PCE and trichloroethane. Next door to the cleaners is Granite Knitting Mills, a hosiery mill that has operated for over 50 years. This facility also used PCE as part of its dry cleaning operations. In 1979, NPWA discovered PCE in a municipal well in the area, and took the well out of service. An estimated 75,000 people obtain drinking water from public and private wells within 3 miles of the site. A well on the Granite Knitting Mill property 200 feet from the North Penn site is contaminated. Approximately 8,000 people live within a mile of the site. The site is 800 feet northwest of Skipjack Creek, which is used for recreational activities.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 03/31/89

Threats and Contaminants

The groundwater is contaminated with PCE and trichloroethane from cleaning operations at the site and other nearby activities. People who drink or come in direct contact with contaminated groundwater may be at risk.

Cleanup Approach

The site is being addressed in a long-term remedial phase focusing on groundwater contamination at the site.

Response Action Status

Entire Site: The EPA is studying the nature and extent of contamination at the site. The study is planned to be completed in 1992 and will recommend alternatives for the final cleanup. Once the investigation is completed, the EPA will select a final remedy for cleanup of the groundwater and other contamination areas identified in the study.

Site Facts: The EPA sent general notice letters to nine potentially responsible parties on February 28, 1990. Contamination at the site may be caused by other sources in addition to those identified.

Environmental Progress

After adding this site to the NPL, the EPA assessed conditions at the North Penn-Area 1 site and determined that no immediate actions were needed while the investigations are taking place.

NORTH PENN-AREA 2

PENNSYLVANIA

EPA ID# PAD002342475

EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County

Hatfield

Other Names:
Ametek, Inc. (Hunter Spring Division)

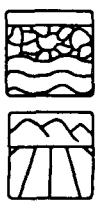
Site Description

The 8-acre North Penn-Area 2 site, formerly listed on the NPL as Ametek, Inc. (Hunter Spring Division), was used to manufacture precision springs, reels, and measuring and controlling apparatus. It is one of several NPL sites suspected of contributing to contamination of the groundwater that supplies the population northwest of Philadelphia. Originally listed under their individual names, each of these sites has been assigned an "Area" number under the name "North Penn." The facility used trichloroethylene (TCE) as a degreasing solvent. In 1983, waste lagoons on site were emptied, backfilled, and revegetated. In 1986, the North Penn Water Authority (NPWA) detected TCE and other volatile organic compounds (VOCs) in on-site and downgradient wells; however, wells upstream from the site contained no contaminants. About 1,100 people live within 1 mile of the site, and 70,000 are within 3 miles of the site, all of whom obtain drinking water from public and private wells within 3 miles of the facility. The site setting consists of a mixture of residential, commercial, and industrial areas.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 10/04/89

Threats and Contaminants



In 1986, the NPWA detected VOCs including TCE from Ametek's process wastes in on-site and downgradient wells. The same contaminants also were found in the soil in several areas of the site. Groundwater and soil contamination could pose a threat to people who accidentally ingest or come in direct contact with them. Surface runoff from the site could contain pollutants and help spread the contamination to off-site areas.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on contamination at the entire site.

Response Action Status

Immediate Actions: The site now is fenced in and is guarded 24 hours a day. Ametek, Inc. took measures to clean up several areas of soil contamination in 1987. The EPA conducted sampling of 16 residential wells located near the site in 1989; none of the wells sampled was found to be contaminated above drinking water standards. In 1990, the EPA resampled a number of residential wells twice; test results showed that contamination levels remain within Federal safety standards.

Entire Site: Investigations into the nature and sources of contamination of the soil and groundwater are expected to begin in late 1991.

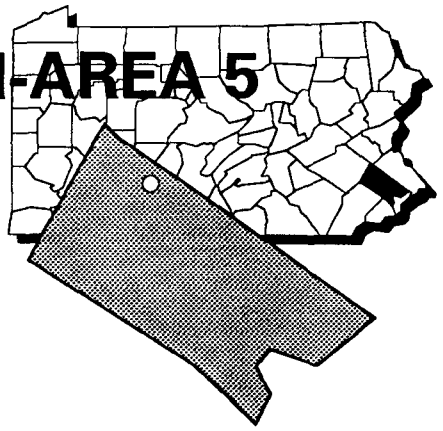
Environmental Progress

Fencing the site and cleaning up several areas of soil contamination have reduced the potential for accidental exposure to site contamination and made the North Penn-Area 2 site safer while studies and cleanup activities are being planned.

NORTH PENN-AREA 5

PENNSYLVANIA

EPA ID# PAD980692693



EPA REGION 3

CONGRESSIONAL DIST. 13

Montgomery County
Montgomery Township

Other Names:
American Electronics Laboratories

Site Description

The 35-acre North Penn-Area 5 site is comprised of several manufacturing facilities. It is one of several sites suspected of contaminating the groundwater that supplies most of the drinking water to the population northwest of Philadelphia. Each of these sites has been assigned an "Area" number under the name "North Penn." American Electronics Laboratories, Inc. manufactures electronic communication equipment and components on this site in Montgomery Township. The State and the company have detected trichloroethylene (TCE), other volatile organic compounds (VOCs), and related breakdown products in on-and off-site wells. The surrounding area is industrial, commercial, and residential. Approximately 100,000 people use public and private wells within 3 miles of the site as their source of drinking water. A public well lies within 50 feet of the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 03/31/89

Threats and Contaminants

The groundwater contains VOCs including TCE and trichloroethane (TCA). Soils on the site may contain TCE. People who obtain their drinking water from wells drawing on the contaminated groundwater in the area are at risk.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a single long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Immediate Actions: Under State order, the owner removed 125 cubic yards of contaminated soil and transported them to an EPA-approved hazardous waste facility. In 1981, the company began treating contaminated groundwater by pumping on-site monitoring wells and sending the water to a nearby sewage treatment plant. In early 1986, the owner installed a unit that uses air stripping to evaporate VOCs from the groundwater.

Entire Site: A study of the nature and extent of groundwater and soil contamination at the site is underway. The investigation will result in recommendations for final cleanup and is scheduled for completion in 1992. The EPA also is evaluating additional sources of contamination.

Site Facts: In 1981, the State and American Electronics Laboratories, Inc. signed a Consent Order to conduct a groundwater recovery program.

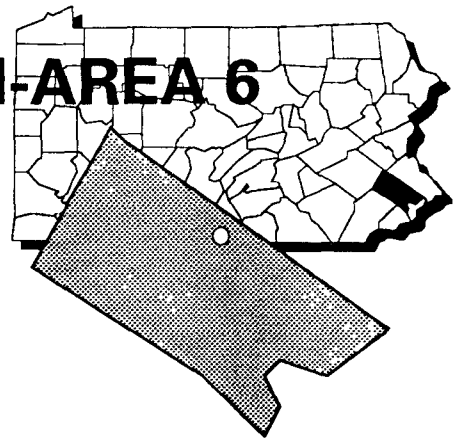
Environmental Progress

The removal of contaminated soils and the use of a pumping and treatment system to treat the contaminated groundwater have reduced the potential for exposure to hazardous materials at the North Penn-Area 5 site. Once the investigations have been completed and final cleanup strategies selected, cleanup work will begin.

NORTH PENN-AREA 6

PENNSYLVANIA

EPA ID# PAD980926976



EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County

Lansdale

Other Names:
J.W. Rex Company
Allied Paint Manufacturing
Keystone Hydraulics

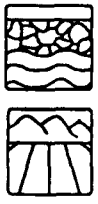
Site Description

The 200-acre North Penn-Area 6 site encompasses the area in and around the Borough of Lansdale. It includes many manufacturing sites and is one of six Superfund sites contributing to contamination of the groundwater that supplies the population northwest of Philadelphia. Originally listed under their individual names, each of these sites has been assigned an "Area" number under the name "North Penn." During its history, varied activities have been carried out at the facility, located in the center of the site, by several previous owners and facility operators. The J.W. Rex Company heat-treated metals on the site until ownership was assumed by the Allied Paint Manufacturing Company, followed by Keystone Hydraulics, which repaired hydraulic equipment and stored construction equipment at the site. Contamination may have been introduced by an underground storage tank on the site during the mid-1970s; the tank was removed in 1979. The North Penn Water Authority (NPWA) found high levels of trichloroethylene (TCE) in the soils surrounding the tank, as well as high levels of other volatile organic compounds (VOCs) in an on-site well. Contamination decreases with distance from the site. An unnamed tributary to Towamencin Creek is about a mile from the site. In 1979, NPWA took a well within 200 feet of the site out of service due to contamination from TCE compounds. Approximately 100,000 people obtain drinking water from public and private wells within 3 miles of the site. A public water well lies across the street from the site. The closest home is next to the site, and the nearest well is 200 feet away. Approximately 45,000 people live within a 3-mile radius of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 03/31/89

Threats and Contaminants



Groundwater has been shown to be contaminated with VOCs in on-site wells, off-site groundwater, and private wells. Soils also are contaminated with elevated levels of VOCs from previous waste disposal practices. Potential threats exist from drinking contaminated groundwater, coming into direct contact with contaminated groundwater or soil, or other domestic use of contaminated groundwater.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the groundwater contamination at the site.

Response Action Status

Initial Actions: In 1989, the parties potentially responsible for the site contamination connected four homes affected by the groundwater contamination to the public water supply.

Groundwater: The EPA is conducting an intensive study of groundwater contamination at the site, exploring its nature and extent. The investigation will recommend the best strategies for final cleanup and is scheduled for completion in 1994. The EPA also is evaluating additional sources of site contamination. Once this phase of the cleanup process has been completed, the EPA will review the investigation findings and will select a final cleanup technology for contaminated groundwater and other contamination areas identified by the study.

Site Facts: The EPA plans to issue General Notice and Special Notice letters to the potentially responsible parties. The EPA is requesting that the parties implement the work plan being devised from the groundwater investigation.

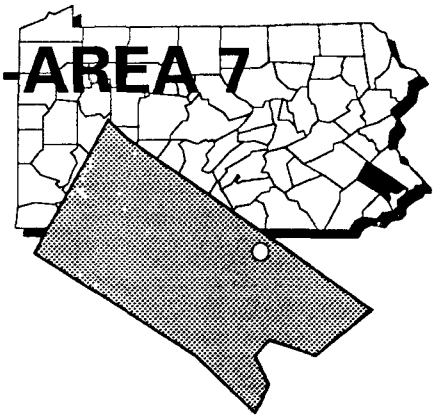
Environmental Progress

By connecting residences affected by the groundwater contamination to the public water supply, the potential for exposure to contaminants at the North Penn-Area 6 site has been greatly reduced while investigations and final remedy selections are taking place.

NORTH PENN-AREA 7

PENNSYLVANIA

EPA ID# PAD002498632



EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County
North Wales

Other Names:
Spra-Finn, Inc.

Site Description

The North Penn-Area 7 site is one of six NPL sites involving the North Penn Water Authority (NPWA) wells that supply drinking water to most of the people living northwest of Philadelphia. Originally listed under their individual names, each of these sites has been assigned an "Area" number under the name "North Penn." The North Penn-Area 7 site consists of approximately 650 acres and encompasses numerous facilities. Spra-Fin, Inc. manufactured metal products at a 1/2-acre facility on the site, using trichloroethylene (TCE) and storing it in a 550-gallon-aboveground tank. This tank replaced a deteriorated tank that was removed in 1982. On-site production wells, as well as on-site soil sampled by the NPWA, show contamination. An estimated 91,000 people obtain drinking water from public and private wells within 3 miles of the site. There is no other source of drinking water. Wissahickon Creek is 1,500 feet to the north of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 03/31/89

Threats and Contaminants

Groundwater and soils are contaminated with volatile organic compounds (VOCs) including TCE and vinyl chloride from former process wastes. People who accidentally ingest or come in direct contact with contaminated groundwater or soil may be at risk.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at cleanup of the source of contamination and groundwater.

Response Action Status

Immediate Actions: Spra-Fin removed 80 cubic yards of TCE-contaminated soil from the area near the deteriorated tank, which was removed in 1982, and is pumping groundwater and treating it with an air stripper. Contaminants removed by the air stripper are further treated prior to being released into the atmosphere. Residential wells were sampled by the EPA in 1987.

Source Control: The EPA is studying the nature and extent of contamination at the site. The investigation will focus on the source of contamination and will include monitoring of private wells. The study, planned for completion in 1992, will recommend alternatives to clean up the site.

Groundwater: The EPA currently is investigating the nature and extent of contamination in the groundwater. The study is scheduled to be completed in 1994.

Environmental Progress

By removing contaminated soil and tanks and treating groundwater, the North Penn-Area 7 site has been made safer while investigations continue leading to the selection of a final remedy.

NORTH PENN-AREA 12

PENNSYLVANIA

EPA ID# PAD057152365

EPA REGION 3

CONGRESSIONAL DIST. 13

Montgomery County
Worcester

Other Names:
Transicoil, Inc.

Site Description

The North Penn-Area 12 site covers 20 acres on Trooper Road in Worcester. This site is one of several suspected of contaminating the groundwater serving as the main source for the drinking water supplies for northwestern Philadelphia. Each of these sites has been assigned an "Area" number under the name "North Penn." Since 1952, several different owners have manufactured electric motors at the Area 12 site, under the name Transicoil, Inc. State records show that the facility used several drums of trichloroethylene (TCE) each year as a degreasing solvent until 1976, when it switched to trichloroethane. The company stores waste oil and solvents in an underground tank. In 1979, the State found elevated concentrations of solvent-based chemicals in on-site wells and in at least two private off-site wells. Subsequent sampling by a consultant to Transicoil confirmed the results. The area is primarily rural, interspersed with agricultural areas and housing developments. Approximately 16,200 people live within a 3-mile radius of the site and use groundwater as a drinking water supply. The closest residence is 600 feet from the site. Schools and hospitals are located nearby. Private well water possibly is used for livestock and crop irrigation within a 3-mile radius of the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 02/21/90

Threats and Contaminants

On-site wells and soils contain volatile organic compounds (VOCs) including TCE from solvent waste disposal. There is a potential health threat from coming in direct contact with or accidentally ingesting contaminated soil or water.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: Residential well sampling is ongoing. An underground waste solvent tank, thought to be the potential source of contamination, has been removed. The Keystone Water Authority now is supplying the Norristown State Hospital with an alternate water supply. The suitability of installing carbon filters on affected wells is being evaluated.

Entire Site: The potentially responsible parties, under EPA monitoring, were conducting a study into the nature and extent of the contamination. These parties recently filed for bankruptcy, which has halted progress of the study.

Site Facts: In 1989, the EPA entered into a Consent Order with Transicoil and Eagle-Picher under which they agreed to conduct an intensive study into the nature and extent of soil and groundwater contamination at the site. While conducting the study, these parties filed for bankruptcy. The EPA now is evaluating possible alternatives for continuing the study.

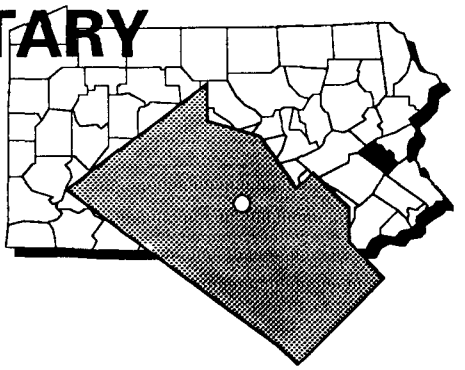
Environmental Progress

By removing what was thought to be the primary source of groundwater contamination and providing an alternative water supply, the North Penn Area-12 site currently does not pose an immediate threat to public health or the environment. Monitoring nearby residential wells will be continued to ensure that contaminant levels are within safety levels while final cleanup actions are being planned.

NOVAK SANITARY LANDFILL

PENNSYLVANIA

EPA ID# PAD079160842



EPA REGION 3

CONGRESSIONAL DIST. 15

Lehigh County

South Whitehall Township

Other Names:
Valley Disposal Division of Novak Corporation
Novak Landfill

Site Description

The 60-acre Novak Sanitary Landfill operated from the late 1950s until 1984. Located near Allentown, the privately owned operation began by disposing demolition wastes in an abandoned quarry and later began accepting municipal and industrial wastes. The owner obtained a solid waste permit from the State in 1972 and started waste disposal activities in five trenches excavated for that purpose. Some of the materials reportedly dumped there were organic wastes, including spent solvents and electroplating wastes containing heavy metals. Monitoring wells on the site and a private well 1,200 feet from the site are contaminated with barium and a variety of volatile organic compounds (VOCs). The landfill is in a limestone region that is very susceptible to groundwater pollution and migration of contaminants. As of 1984, a ditch encircling the landfill diverted runoff and leachate into an on-site pond. Surface water is threatened because this system was poorly engineered, and the landfill was not covered adequately. The residential community within 3 miles of the site houses approximately 1,700 people, but about 17,300 people are served by 855 public and private wells within 3 miles of the site. Jordan Creek, which is used for recreation, is within 1,000 feet from the site. Although the State attempted to close the site in 1984, the closure was overruled by the Environmental Hearing Board, and the site was allowed to re-open. The site presently is closed.

Site Responsibility: This site is being addressed through a combination of Federal, State, local and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 10/04/89

Threats and Contaminants

The groundwater and leachate on site are contaminated with VOCs from former disposal practices. A sedimentation pond and off-site well are contaminated with VOCs. Potential threats exist from accidentally ingesting or coming in direct contact with contaminated soil or water or from inhaling contaminants that evaporate from polluted water.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Inital Actions: In 1985, South Whitehall Township extended its water line to two homes near the landfill that were subject to contamination.

Entire Site: Under EPA monitoring, the parties potentially responsible for the site contamination began an intensive study of problems at the landfill in 1988. This study is exploring the nature and extent of soil and water pollution and will recommend the best strategies for final cleanup. The study is slated for completion in 1992.

Site Facts: The potentially responsible parties are conducting a study of the contamination under an Administrative Consent Order dated December 1988.

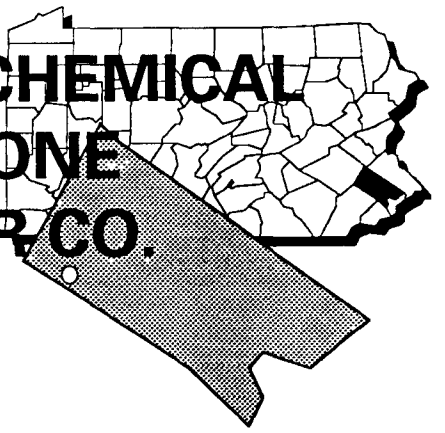
Environmental Progress

The extension of the water line will help to ensure the safety of those living by the site, while the potentially responsible parties, under EPA monitoring, conduct further investigations and begin cleanup activities at the Novak Sanitary Landfill site.

OCCIDENTAL CHEMICAL CORP./FIRESTONE TIRE & RUBBER CO.

PENNSYLVANIA

EPA ID# PAD980229298



EPA REGION 3
CONGRESSIONAL DIST. 05
Montgomery County
Lower Pottsgrove Township

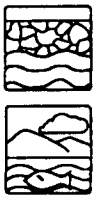
Site Description

Three consecutive owners disposed of industrial wastes at the 30-acre Occidental Chemical Corp./ Firestone Tire & Rubber Co. site. From 1942 to 1945, the Jacobs Aircraft and Engine Company manufactured aircraft engines; from 1945 to 1980, the Firestone Tire and Rubber Company made tires and polyvinyl chloride (PVC); and from 1980 to the present, the Occidental Chemical Company has produced PVC. The disposal area has several components. From 1942 to 1985, operators dumped wastes, including cutting oils, metal filings, tires, and PVC sludge resins, into a 17-acre landfill. In 1985, with State approval, the owner closed this landfill, capping it with two rubber covers and 2 feet of earth. A 6-acre landfill, currently active, was opened in 1973 to receive PVC sludges and fly ash. In 1974, two lined lagoons were constructed to receive and pre-treat the plant effluent, which then is discharged to the municipal sanitary sewer system. The site also encompasses four inactive, unlined seepage lagoons. The area is both agricultural and urban. Pottstown, with an approximate population of 22,000, is a major town in the area. Approximately 31,000 people live within a 2-mile radius of the site. The site is in the flood plain of the Schuylkill River, which is used for water supply and recreational activities.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs), including trichloroethylene (TCE) and vinyl chloride from former site manufacturing activities. Possible health threats include drinking the contaminated groundwater. Local agricultural lands depend on water from the Schuylkill River for irrigation; contaminated water use therefore may threaten crops and livestock. Also, nearby wildlife and wetlands are threatened by the contamination from the site.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: The parties potentially responsible for the site contamination are conducting an intensive study of problems at the site. The investigation is exploring the nature and extent of the contamination and will recommend the best approach for final cleanup. It is slated for completion in 1992.

Site Facts: A Consent Order between the EPA and the potentially responsible parties was signed in 1989, requiring the latter to conduct the site investigation activities.

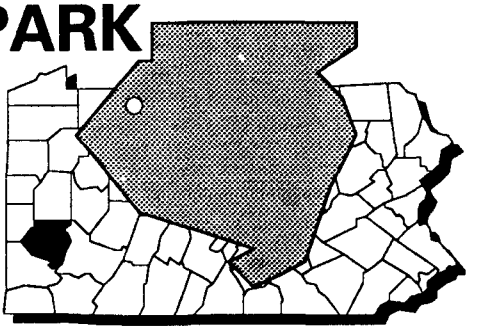
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations at the Occidental Chemical Corp./Firestone Tire & Rubber Co. site and determined that the site currently is safe while waiting for completion of the investigation and for the final cleanup activities to begin.

OHIO RIVER PARK

PENNSYLVANIA

EPA ID# PAD980508816



EPA REGION 3
CONGRESSIONAL DIST. 14
Allegheny County
On the western end of Neville Island

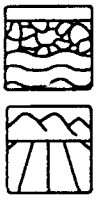
Site Description

The 32-acre Ohio River Park site, located on Neville Island, served as a municipal waste landfill for Neville Township from the 1930s until the mid-1950s. The site was owned by Pittsburgh Coke & Iron Co. (later named Pittsburgh Coke & Chemical Co.) from the 1920s until 1970, when the property was transferred to a wholly owned subsidiary, Neville Land Co. From 1952 until 1965, trenches were dug on site to dispose of wastes including coking sludges (often containing benzene and toluene), cement production wastes, and pesticides. Other industrial wastes, including plant demolition materials and slag, also were disposed of on site. In 1976, the property was donated to the County. In 1978, Allegheny County began developing the site as a park, but stopped construction after industrial waste was found. After it was determined that a public health threat existed at the site, the land was returned to Neville Land Co. An estimated 40,000 people obtain drinking water from public and private wells within 3 miles of the site. Seven municipal wells are 600 to 1,200 feet from the site. An outfall from a storm sewer system that drains a small portion of the northeastern quadrant of the site reportedly is contaminated with pesticides. This outfall discharges to the Ohio River. Sewickley Water Works draws water from the river approximately 2 miles downstream from the contaminated outfall. The intake provides drinking water to an estimated 8,000 people.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/26/89
Final Date: 08/30/90

Threats and Contaminants



On-site groundwater and soils are contaminated with volatile organic compounds (VOCs) including benzene and toluene and various pesticides. Potential health threats to people include drinking, accidental ingestion, and direct contact with contaminated groundwater and soil.

Cleanup Approach

The site is being addressed in two stages: initial actions and a single long-term remedial phase directed at cleanup of the entire site.

Response Action Status

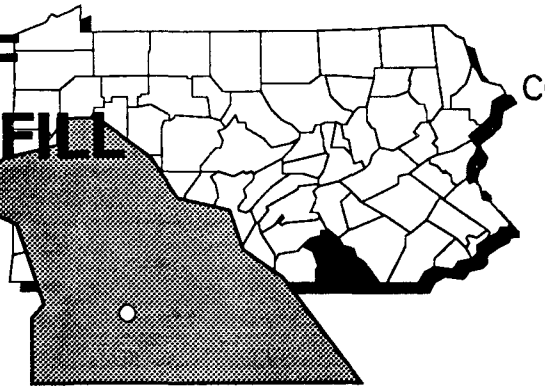
Initial Actions: Neville Land Co. performed a site evaluation that included the installation of 27 multi-level monitoring wells, extensive sampling, excavation of test pits, analysis of aerial photographs, and toxicological and hydrogeological evaluations. Other activities included the removal of a container of almost pure dichlorophenoxy acetic acid, a pesticide; removal of the surrounding soil; stabilization of a section of shoreline where sulfur-containing waste was exposed; the installation of a fence; and posting warning signs to keep people off the site.

Entire Site: An investigation is scheduled to begin in 1991 that will define the contaminants of concern and will recommend alternatives for site cleanup. The investigation is scheduled to be completed in 1992.

Environmental Progress

The removal of the pesticide and contaminated soil, stabilization of the shoreline, and installation of the fence and warning signs have reduced the potential for the nearby population to come into direct contact with contaminants while the investigation leading to the selection of a final cleanup remedy is being planned at the Ohio River Park site.

OLD CITY OF YORK LANDFILL
PENNSYLVANIA
EPA ID# PAD980692420



EPA REGION 3
CONGRESSIONAL DIST. 19
York County
Just outside Seven Valleys

Other Names:
Seven Valleys Landfill

Site Description

The 178-acre Old City of York Landfill site, 56 acres of which was a landfill, was owned and operated by the City of York from 1961 to 1975. Industrial wastes reportedly were disposed of at the site. In 1981, EPA and State investigators found that the landfill was contaminating groundwater in the area with volatile organic compounds (VOCs). They also discovered that contaminated liquids were leaching from the site into the nearby Codorus Creek, which is used for fishing and other recreational activities. Local wells were contaminated, and the State advised affected residents to find other sources of drinking water or to treat the well water before consuming it. The surrounding area is rural and residential. The closest well is 10 feet away, and about 460 people live within a mile of the site. About 2,000 people live within 3 miles of the site and draw groundwater from wells; some residents live on the site itself. The City of York water supply intake is 8 miles downstream of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants

The groundwater and domestic wells are contaminated with VOCs including trichloroethylene (TCE) from former waste disposal practices. Surface water on site contains zinc, iron, lead, and arsenic. The major threats to health are drinking contaminated well water, conming into direct contact with, or accidentally ingesting contaminated soil and leachate on site.

Cleanup Approach

The site is being addressed in a single long-term remedial phase directed at cleanup of the entire site.

Response Action Status

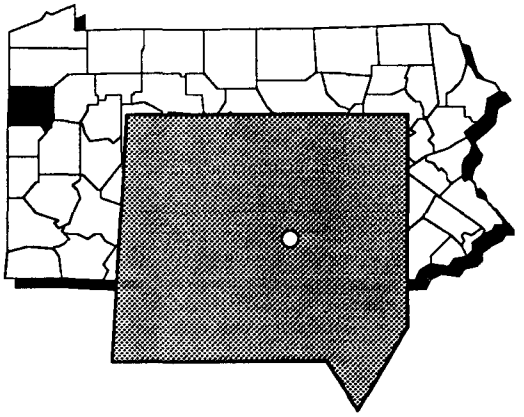
Entire Site: Under EPA monitoring, the parties potentially responsible for site contamination are undertaking an intensive study of groundwater contamination at the landfill. The study is exploring the nature and extent of site problems and will recommend the best alternatives for final cleanup. Workers have drilled monitoring wells on and off the site and are sampling soil and groundwater. Results are expected to be available in 1991, after which the EPA will select a final remedy for the Old City of York Landfill.

Site Facts: A Consent Order for a study to determine the nature and extent of contamination and to identify alternatives for cleanup was entered into with the City of York, Rite-Way Services, and the Macke Company in 1987. There has been a history of odor complaints by area residents regarding this site.

Environmental Progress

The EPA has assessed the conditions at the Old City of York Landfill and has found that the site currently poses no immediate threat to public health or the environment while the studies leading to the selection of a final cleanup remedy are continuing.

OSBORNE LANDFILL
PENNSYLVANIA
EPA ID# PAD980712673



EPA REGION 3
CONGRESSIONAL DIST. 21
Mercer County
1/2 mile east of Grove City

Other Names:
Cooper Beasmer Landfill

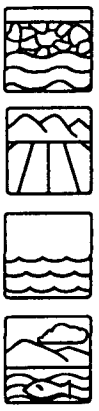
Site Description

The 15-acre Osborne Landfill is located on an abandoned strip mine. The landfill was used for waste disposal from the 1950s until 1978, when the State closed it for accepting industrial wastes without a permit. These waste materials included spent paint, asbestos, solvents, waste coolants, waste sand, waste acid, scrap metal, cooling system sludge, slag, and waste oils. More than 600 drums had been left at the site; many were crushed, rusted, or bulging. Wastes were dumped, scattered, and piled in the strip mine area and near one of three lagoons on the site. Nearby Grove City has approximately 8,100 residents. The closest home is 1/4 mile away. Two private wells are located downgradient of the site; municipal wells are located upgradient. Both types of wells are within a mile of the site. The property is surrounded by woods, wetlands, light residential development, and farmland. Several intermittent streams flow across the site and into Swamp Run, a local fishing area, which then flows into Wolf Creek. Nearby wetlands serve as wildlife habitat and as a site for migratory waterfowl and other birds.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 07/01/82
Final Date: 09/01/83

Threats and Contaminants



On-site groundwater and leachate are contaminated with various heavy metals, volatile organic compounds (VOCs), and pentachlorophenol (PCP) from the former waste disposal practices. The soil contains heavy metals including arsenic and lead, VOCs, and polychlorinated biphenyls (PCBs). On-site surface water is contaminated with VOCs. Possible health hazards include accidentally ingesting or coming in direct contact with contaminated groundwater, soil, or surface water. Wetlands and a swamp near the site are contaminated with very low levels of PCBs.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and the wetlands and deep aquifer.

Response Action Status

Immediate Actions: Cooper Industries, Inc., one of the parties potentially responsible for the site contamination, voluntarily conducted some cleanup activities in 1983. Workers built a security fence around the site and posted it with warnings to prevent unauthorized access. They also removed and disposed of 83 filled drums, 460 empty drums, and 45 cubic yards of contaminated soil.

Entire Site: In 1988, the EPA took over an intensive study of site conditions begun by Cooper Industries in 1984. In 1990, the EPA chose an innovative remedy to cleanup the fill material, the on-site water table, and the shallow aquifer. A slurry wall will be built around the perimeter of the fill area, along with the installation of a clay cap and revegetation of the site. In addition, water will be extracted from the fill area, treated, and reinjected into the on-site mine pool. Groundwater from the shallow aquifer also will be extracted, treated, and reinjected into the on-site mine pool.

Wetlands and the Deep Aquifer: The EPA will begin an investigation into the nature and extent of contamination of the wetlands and the deep aquifer in late 1991.

Site Facts: After negotiating with the EPA and the State of Pennsylvania, Cooper Industries, Inc., which is responsible for some wastes at the site, voluntarily performed some cleanup actions and signed a Consent Order with the State to conduct the study to determine the nature and extent of site contamination. Cooper began the study, and the EPA has completed it. A Unilateral Administrative Order was issued to the potentially responsible parties, requiring them to perform the cleanup activities.

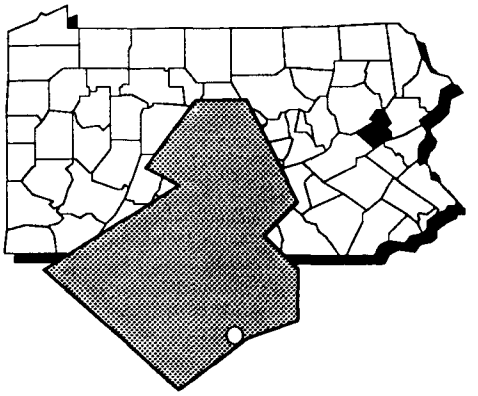
Environmental Progress

By building a fence around the site to limit access and removing contaminated drums and soil, the potentially responsible parties have reduced the risk of exposure to contaminants for the areas surrounding the Osborne Landfill site while the final cleanup activities and investigations leading to cleanup of the wetlands and of the deep aquifer are planned.

PALMERTON ZINC PILE

PENNSYLVANIA

EPA ID# PAD002395887



EPA REGION 3

CONGRESSIONAL DIST. 11

Carbon County
Palmerton

Other Names:
New Jersey Zinc (Gulf & Western)

Site Description

The Palmerton Zinc Pile site covers over 2,000 acres and was used by a zinc smelter. The site encompasses the Blue mountain area and much of the valley. During the past 70 years, the New Jersey Zinc Company has dumped 32 million tons of residue at the site, creating a cinder bank that extends for 2 1/2 miles and measures about 200 feet high and 500 to 1,000 feet wide. The smelting operations emitted huge quantities of heavy metals throughout the valley. As a result, approximately 2,000 acres on Blue Mountain, which is adjacent to the smelter, have been defoliated, leaving a barren mountain site. Soil on the defoliated area of the mountain has contaminated the water flowing across it. The runoff and erosion have carried contaminants into Aquashicola Creek. Approximately 850 people live within 1 mile of the site; the population of the town of Palmerton is 7,000. The Palmerton Water Company has four production wells at the foot of Blue Mountain that supply water to the towns of Palmerton and Aquashicola.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants

The air is contaminated with heavy metals such as lead, cadmium, and zinc from former process wastes. Nearby wells and soils are contaminated with zinc and cadmium from the former site operations. Aquashicola Creek is contaminated with zinc and cadmium from surface runoff. People who come in direct contact with or accidentally ingest contaminated groundwater or surface water may be at risk. Contaminants have been found in soil and garden vegetables and may pose a health threat to people who eat the vegetables. Children in Palmerton have been found to have elevated levels of cadmium and lead in their hair and blood. Fish in Aquashicola Creek contain bioaccumulated contaminants, and eating them poses a health threat. Horses and cattle that graze in the area have high concentrations of lead and cadmium, which has caused substantiated cases of illness and fatigue.

Cleanup Approach

The site is being addressed in five stages: initial actions and four long-term remedial phases focusing on cleanup of Blue Mountain, the Cinder Bank area, soil cleanup, and groundwater and surface water cleanup.

Response Action Status

Initial Actions: In 1983, the New Jersey Zinc Company placed material containing lime at the base of the cinder bank to control runoff. The company also graded and seeded a portion of the bank in an effort to control erosion.

Blue Mountain: In 1987, the EPA selected a remedy to clean up Blue Mountain, which included installing a concrete pad with berms to mix sewage sludge and fly ash, spreading lime and potash on the areas to be revegetated, and planting grass seed or seedlings on the area. Horsehead Resource Development, Co. has conducted plantings on several experimental plots to design the full scale cleanup. The cleanup activities are providing a fertilizer base to encourage the regrowth of forested areas. Construction for the full-scale cleanup is planned to begin in 1991. An additional 30-acre experimental plot began in 1990. This first phase is scheduled for completion in 1996.

Cinder Bank: In 1988, the EPA selected a remedy to clean up the cinder bank, which includes revegetating the area and extinguishing the subsurface smoldering fire. Engineering and cost analysis of this selected remedy is under review. Review of this analysis may result in selecting an alternative remedy. Horsehead Resource Development, Co. will be conducting additional studies in late 1991.

Soil: Under the EPA's supervision, the party potentially responsible for the site contamination is studying the nature and extent of the soil contamination. Alternatives for the cleanup will be recommended, and the EPA will select the final cleanup strategy. A review of the study currently is underway.

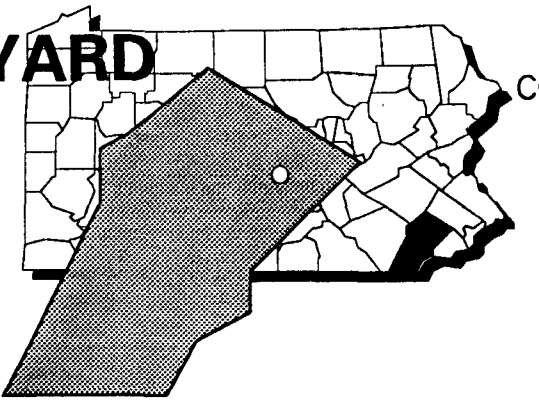
Groundwater and Surface Water: The EPA is searching for additional potentially responsible parties to study the type and extent of the contamination in groundwater and site streams and creeks.

Site Facts: In 1985, the EPA and the potentially responsible parties signed a Consent Order. Under terms of the agreement, the parties will conduct a study to determine the type and extent of the contamination. The community is concerned about the financial well-being of the plant. Several residents have requested that the site be exempt from further investigations.

Environmental Progress

The EPA and the potentially responsible parties are conducting experimental revegetation techniques to effectively control erosion and contaminant runoff from Blue Mountain. Once the extensive studies into permanent cleanup alternatives have been completed, the EPA will select the final cleanup remedy for the Palmerton Zinc Pile site.

PAOLI RAIL YARD
PENNSYLVANIA
EPA ID# PAD980692594



EPA REGION 3
CONGRESSIONAL DIST. 05
Chester County
Paoli

Other Names:
Conrail Paoli
Conrail Repair Shop
Paoli PCB Site
Paoli Railcar Facility

Site Description

The Paoli Rail Yard site covers approximately 28 acres. The site consists of an electric train repair facility and a commuter rail station owned by Amtrak and has been operated by the Southeastern Pennsylvania Transportation Authority (SEPTA) for over 30 years. Commuter trains are serviced, repaired, and stored at this facility. Routine maintenance and repair of railroad cars involved electrical equipment that contains polychlorinated biphenyls (PCBs). Until 1986, the site was unsecured and easily accessible; residents and commuters regularly used it as a shortcut to reach both the train station and the commercial properties. In the late 1970s, both the EPA and the Pennsylvania Department of Environmental Resources (PADER) inspected the Paoli Rail Yard. Amtrak and SEPTA were required to determine the extent of contamination and to correct any problem areas. Amtrak and SEPTA collected samples, cleaned up, and further studied the area. In 1985, samples taken in 1984 were made available to the EPA, indicating a severe PCB problem. These sample results were verified, and in 1986, the EPA filed a complaint seeking an order to require Amtrak and SEPTA to limit access to the yard, control the movement of PCBs from the site, conduct sampling and analysis, and to clean up the yard. The site is surrounded on three sides by residential communities, and on the fourth side, by commercial facilities. Approximately 1,480 people live within 1 mile of the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 08/30/90

Threats and Contaminants

Valley Creek sediments are contaminated with PCBs. PCB contamination in the on-site soil ranges as high as 9% and occurs as deep as 3 feet. The yards of several residences in the area also were found to be contaminated. Car shop workers had elevated levels of PCBs in their blood. Direct contact with the soil is the main health threat to the general public. This threat has been substantially reduced by limiting access to the site by fencing, installed in 1986, and by soil excavation in 1989. The State banned fishing in nearby Valley Creek when PCBs were found in fish and creek sediment.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: Extensive sampling of the site by the owner, the State, and the EPA has characterized the contamination. Three basins were constructed by the EPA to prevent erosion of contaminated soils, and about 700 tons of contaminated soils were excavated from 35 yards in the nearby residential area. The excavated areas were backfilled. The EPA paved the parking lot and other high-use areas of the car shop in 1987 to prevent off-site seepage or movement of the PCB-contaminated soils from vehicular and foot traffic.

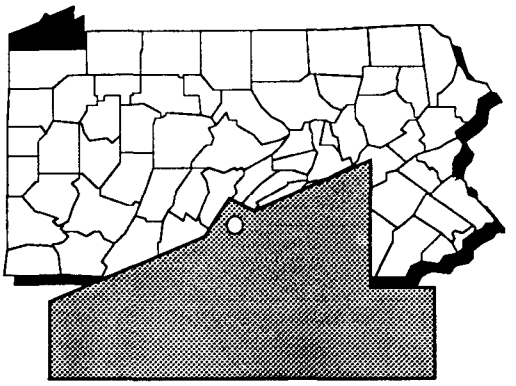
Entire Site: A study is underway to determine the extent and nature of contamination. The soil, car shop, streams, sediments, and biota of the area have been sampled. The drainage area also is under investigation. The alternatives for cleanup will be assessed, and the final remedy is expected to be selected in late 1991.

Site Facts: The owner was asked to study the nature and extent of contamination and to develop cleanup strategies at the site in 1986, as a result of an EPA complaint filed in Federal Court.

Environmental Progress

The site currently is posted, and a fishing ban is in effect to protect residents. The construction of the erosion-prevention basins, the paving of high traffic areas, and the removal of contaminated soils at the Paoli Rail Yard site have reduced the risk of exposure to contaminants while the site awaits the outcome of the investigation into cleanup alternatives and the selection of a final remedy.

PRESQUE ISLE
PENNSYLVANIA
EPA ID# PAD980508865



EPA REGION 3
CONGRESSIONAL DIST. 21
Erie County
Erie

Other Names:
Presque Isle Gas Well

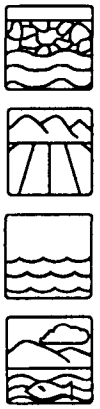
Site Description

The Presque Isle site is located on the Presque Isle State Park peninsula. In the early 1970s, the Erie County Health Department noted a seep, near Beach No. 7, that was discharging a noxious hydrogen sulfide-bearing black liquid. The discharge released hydrogen sulfide into the air and a black fluid containing hazardous substances into the soil and shallow groundwater. This discharge continued until the early 1980s. The source of the discharge was found to be an unplugged natural gas well that had been dug in 1910 and was abandoned in 1920. The well intercepts a geologic formation known as the Bass Island Formation. It is unclear whether the fluid discharging from the Bass Island Formation is a natural brine or is related to the deep well injection of wastes by the Hammermill Paper Company, located near the State Park. The Hammermill Paper Company operated three underground injection wells between 1964 and 1971 and injected 1 billion gallons of neutral sulfite pulping liquor waste into the Bass Island Formation. Eleven residential wells in the area were sampled in 1982 and were found to be uncontaminated. The City of Erie has a population of 119,000. Presque Isle is a public recreational area used for picnicking, swimming, and fishing. The park contains an ecological reservation and is a natural habitat for deer, squirrels, waterfowl, and many plant-eating species. The annual average number of visitors to Presque Isle State Park is 4 million. Lake Erie and its associated bays are the major bodies of surface water that have been affected by discharges from the well.

Site Responsibility: This site was addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 02/13/88

Threats and Contaminants



The groundwater and soils contained volatile organic compounds (VOCs) and metals. People and animals visiting the area around the well could have been exposed to contaminated soil and surface water. Exposure to swimmers and municipal water users was unlikely, because any contaminants would be diluted in the large volumes of water in Lake Erie.

Cleanup Approach

The site has been addressed in a single long-term remedial phase designed to plug the natural gas well at the site.

Response Action Status

Entire Site: The well stem has a fence around it and there are no physical hazards associated with the site. In 1982, the well was plugged by the Pennsylvania Department of Environmental Resources (PADER) with cement down to 900 feet, sealing the Bass Island formation. An inspection in 1987 detected no odors nor any evidence of dissolved sand or of stressed vegetation. No discharge has been observed since 1982. Investigations by the EPA and the PADER found no contamination in the air, surface water, groundwater, or soil. The EPA and the PADER determined that the release poses no significant threat to public health or the environment and that any threat to the public was eliminated when the well was plugged in 1982. The site was placed on the NPL in 1983 because of the possibility for releases from other improperly plugged oil and gas wells in the surrounding area. The site was deleted from the NPL on February 13, 1988.

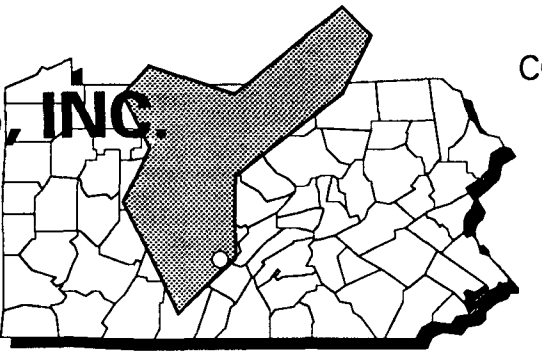
Environmental Progress

The EPA and the PADER have determined that the Presque Isle site currently poses no immediate threat to the public or the environment and have deleted the site from the NPL. The EPA and the State are continuing to monitor the area in the event of further possible releases from similar natural gas wells in the vicinity.

PUBLICKER INDUSTRIES, INC.

PENNSYLVANIA

EPA ID# PAD981939200



EPA REGION 3

CONGRESSIONAL DIST. 01

Philadelphia County
Southeast Philadelphia

Other Names:
Cuyahoga Wrecking Plant

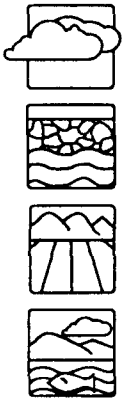
Site Description

The 37-acre Publicker Industries, Inc. site housed a liquor and industrial alcohol distillation process from 1912 to 1985. As production declined in the late 1970s, the company used some of its tanks to store fuel oils for other companies. In 1986, the owner sold the property to Overland Corporation, a subsidiary of Cuyahoga Wrecking Corporation. Shortly after Overland Corporation began demolition operations, they declared bankruptcy and abandoned the facility. The site includes nearly 440 tanks, storage drums, product stock, warehouses, a power plant, and an estimated several hundred miles of aboveground and underground process lines. Some of these process lines are covered with asbestos. One hundred and eighty cylinders contain toxic, flammable, and reactive gases. Electrical equipment containing polychlorinated biphenyls (PCBs) also is on site. Two million gallons of hazardous materials were on site when the facility was abandoned. Many vessels and transfer lines containing hazardous materials were in various stages of disrepair. In 1987, the portion of the facility using carbon dioxide was destroyed in a multi-alarm fire. Numerous explosions and fire flares were reported. Shallow on-site groundwater is contaminated, as is the Potomac-Raritan-Magothy Aquifer, which supplies drinking water to 185,000 people. The nearest public well is about 1 1/2 miles away. An estimated 3,600 people live within a mile of the site, and 100,000 live within 2 miles. The site is located along the Delaware River, which is used for recreation; and Peregrine Falcons nest on the Walt Whitman Bridge near the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 05/05/89
Final Date: 10/04/89

Threats and Contaminants



Routine air monitoring revealed volatile organic compounds (VOCs) from former site activities in the air on site in 1988. Shallow on-site groundwater is contaminated with toluene. The deep on-site groundwater in the Potomac-Raritan-Magothy Aquifer contains VOCs such as toluene and xylene. VOCs and heavy metal contamination also have been detected in on-site soils. Accidentally ingesting or coming into direct contact with contaminated groundwater or soil poses a threat to the public.

Cleanup Approach

This site is being addressed in three stages: emergency actions and two long-term remedial phases.

Response Action Status

Emergency Actions: From 1987 through 1988, the EPA significantly stabilized conditions on site by addressing fire and explosion threats on the surface. Solid and liquid gas streams were bulked and stored on site and were disposed in 1990, and highly reactive lab wastes and gas cylinders were transported to EPA-approved facilities.

Site Stabilization: Actions selected for the cleanup of the remaining on-site contamination include: (1) completion of site stabilization activities started as an emergency action; (2) transportation and off-site disposal of bulked waste streams; (3) demolition of above-grade process lines, including recovery and off-site disposal of the contents of the lines; (4) demolition of on-site buildings; and (5) removal and proper packaging and storage of pipe insulation materials, which may contain asbestos, for future off-site disposal. Cleanup actions began in 1989. All stabilization activities were completed in 1990.

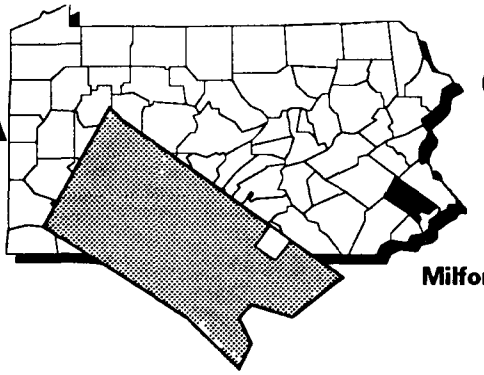
Source Control: A study into the source and extent of groundwater, surface water, soil, and other contamination, and into the possible remedies for cleanup, is expected to be completed in 1991. Depending on the results of this study, future project phases to address additional contamination areas are likely.

Site Facts: On July 7, 1977, the EPA and Bruga Corporation entered into a Consent Order. Under the Order, Bruga is dismantling and decontaminating personal property in two portions of the site it had purchased from the bankrupt estate. On December 8, 1988, the EPA and AAA Warehousing Inc. entered into a separate Consent Order. Under the order, AAA is removing some stainless steel tanks and rail tank cars it owns.

Environmental Progress

By removing highly flammable materials from the site, the EPA has stabilized reactive wastes located on site and reduced the immediate threats to the surrounding residents at the Publicker Industries, Inc. site while the studies leading to cleanup activities are taking place.

RAYMARK
PENNSYLVANIA
EPA ID# PAD039017694



EPA REGION 3
CONGRESSIONAL DIST. 08
Montgomery County
Hatboro

Other Names:
Milford Rivet and Machine Co., Hatboro Plant
Jacksonville Road
Penn Fasteners Inc.

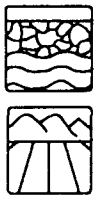
Site Description

The 7-acre Raymark site previously was owned by the Penn Rivet and Machine Company from 1947 until 1954. A series of name changes, mergers, incorporations, and title conveyances have occurred since 1954. The present operator, Penn Fasteners, Inc., has manufactured rivets and fasteners at the site since 1980. From 1948 to 1972, treated wastes and untreated wastewater from electroplating and degreasing operations were disposed of in four unlined lagoons on site. In 1972, the accumulated sludge was removed, and the lagoons were filled with clean soil and berm material. During the same period, trichloroethylene (TCE) was stored in outdoor, aboveground tanks; however, TCE no longer is used at the facility. Building drains are a suspected major source of existing soil contamination. The Raymark site was identified as the source of contamination in the Stockton Aquifer, which supplies drinking water to approximately 920,000 people through public and private wells within 3 miles of the site. Since 1979, eight Hatboro Water Authority wells near the site were contaminated with TCE. Of these eight wells, some were taken out of service, while others were equipped with treatment systems. Pennypack Creek is used for recreation and is 6,800 feet downgradient of the site; however, no contamination in the creek has been detected.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants



The site has been determined to be a source of TCE contamination in the Stockton Aquifer. Wells within 250 feet from the site are contaminated with TCE, as is the soil. Public water supply wells provide the public with treated water. Due to low contaminant concentrations, exposure to the soil on site does not present a human health risk.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the soil and source control and groundwater cleanup.

Response Action Status

Immediate Actions: Lagoons that once stored wastewater from the site have been backfilled with clean soil fill. When the lagoons were closed in 1972 and 1973, the remaining waste sludge was removed by a potentially responsible party to an off-site disposal facility.

Soil and Source Control: A study into the nature, extent, and source of contamination of soil at the site, as well as an assessment of the alternative cleanup technologies, is underway. It is scheduled to be completed in 1991, and the design of the remedy selected by the EPA also is scheduled to begin in 1991. A treatability study (soil vapor extraction) was performed in 1990.

Groundwater: The cleanup remedy chosen by the EPA in 1990 will include the use of vapor phase carbon adsorption at air stripper towers in existing contaminated drinking wells and the installation of source control wells equipped with air strippers and vapor phase carbon adsorption capabilities. Treated groundwater will be discharged to a nearby creek. The design of the cleanup technologies is underway and is scheduled for completion in 1992.

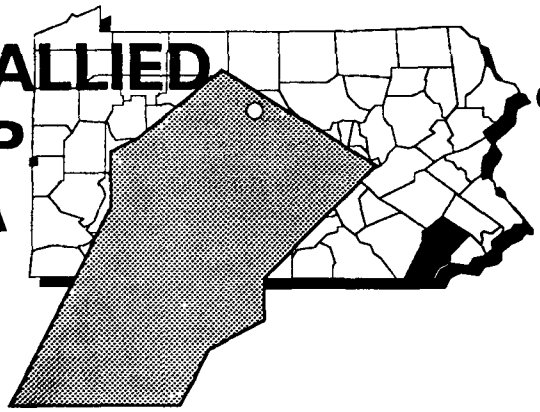
Environmental Progress

The removal of contaminated sludge from the lagoon areas and the closure or treatment of contaminated drinking supply wells have reduced the potential for exposure to TCE-contaminated sludges and groundwater at the Raymark site while investigations are taking place and cleanup activities are being planned.

RECTICON/ALLIED STEEL CORP

PENNSYLVANIA

EPA ID# PAD002353969



EPA REGION 3
CONGRESSIONAL DIST. 05
Chester County
Parkerford

Site Description

The 5-acre Recticon/Allied Steel Corp. site was the location for the manufacturing of silicon wafers from 1974 to 1981. Recticon is a subsidiary of Rockwell International. As early as 1979, the Pennsylvania Department of Environmental Resources (PADER) detected trichloroethylene (TCE) in the groundwater. In 1980, a Recticon contractor found TCE in the plant drain lines, in sludge trapped within buried waste lines, and in soils. In addition to the Recticon portion of the site, Allied Steel Corporation has fabricated steel since 1972 on a property 100 feet to the southeast of Recticon. In 1984, an Allied contractor determined that leakage in the area of Allied's compressor room had released TCE to the ground. Also, high levels of TCE were found in Allied's on-site well. The area around the site is residential, industrial, and agricultural. An estimated 17,300 people obtain drinking water from public and private wells, which are within 3 miles of the site. Runoff from the site reaches the Schuylkill River 2,400 feet downstream. The local water company blends water from the river with well water to serve its 11,500 customers.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 10/04/89

Threats and Contaminants

The groundwater, sludge, and wells in the area are contaminated with TCE from former process wastes, and private wells sampled by the EPA in 1990 were found to be contaminated with other volatile organic compounds (VOCs), in addition to TCE. Runoff from the site reaches the Schuylkill River and may be contaminated with TCE. Accidentally ingesting or coming into direct contact with contaminated groundwater, sludge, or surface water would threaten the health of people in the area.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1981, Recticon removed contaminated soil from the site and transported it to an EPA-approved facility for disposal. Recticon pumped and treated the groundwater, but the process did not resolve the contamination at the site. In 1990, the potentially responsible parties agreed to install activated carbon filtration units in each of the homes and businesses that have been affected by groundwater contamination. To date, five businesses and one residence have had water treatment units installed. Testing of water supplies will continue.

Entire Site: Under EPA monitoring, the parties potentially responsible for the site contamination are conducting a study to determine the nature and extent of the contamination and the possible alternative technologies for cleanup. The study began in 1990 and is scheduled to conclude in 1992. Once the investigation has been completed, the EPA will evaluate the findings and select a final cleanup remedy for site contamination.

Site Facts: The PADER and Recticon entered into a Consent Order in 1981 to undertake initial actions at the site. The potentially responsible parties have provided an alternate drinking water supply to residents whose wells are contaminated beyond acceptable EPA levels as a result of a Consent Order with the EPA signed in 1990. This second Consent Order also required the potentially responsible parties to conduct site investigations.

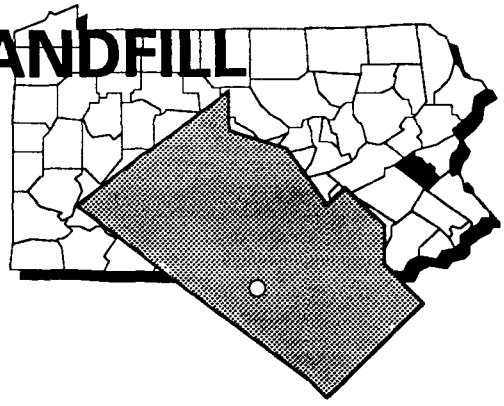
Environmental Progress

By removing contaminated soil from the site and providing an alternate drinking water supply, the potentially responsible parties and the EPA have reduced the potential for exposure to contaminants at the Recticon/Allied Steel Corp. site while investigations and cleanup activities are taking place.

REESER'S LANDFILL

PENNSYLVANIA

EPA ID# PAD980829261



EPA REGION 3
CONGRESSIONAL DIST. 15
Lehigh County
5 miles west of Allentown

Site Description

The 15-acre Reeser's Landfill site is an inactive unlined dump for municipal wastes near Haafsville, in Upper Macungie Township. Battery wastes, industrial wastes, and drums may have been stored at the site. The lessee, Reeser's Hauling Service, never received a State license to operate a disposal facility at the site. The State believes that wastes were dumped into a water-filled quarry and into excavated trenches, thus threatening the groundwater. When the landfill site was placed on the NPL, it was inadequately covered. Soil at the landfill was stained by leachate. The EPA conducted sampling at the site and discovered that a nearby local well appeared to be contaminated with heavy metals. The owner appealed when the State ordered closure of the landfill in 1979 and 1981. Operations ceased in 1980, and the landfill has not reopened; however, the State is seeking proper closure by the owner. Homes in the immediate area of the site rely on private wells for drinking water. Public wells serve an estimated 3,400 people and are located approximately 2,000 feet from the site. Most of the landfill drains to Iron Run, a tributary to the Lehigh River. The closest residence and well is 800 feet from the site. The population within a mile of the site is 265; the population within 3 miles is 2,400. There are 268 wells within 3 miles of the site.

Site Responsibility: This site was addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 04/01/85
Final Date: 07/01/87
Deleted Date: 05/31/90

Threats and Contaminants

Zinc and lead, allegedly from former waste disposal practices, were found in monitoring wells. Local wells were contaminated with zinc, mercury, cadmium, and lead. Soils and sediments also contained evidence of heavy metals. The EPA has determined the site does not pose any health threats.

Cleanup Approach

The site was addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: Between 1987 and 1989, the EPA undertook an intensive study of groundwater contamination and conditions at the site. This study showed conclusively that the landfill is not contaminating the groundwater. The EPA found no evidence of hazardous waste dumping nor any adverse effects on human health or future land use plans. Based on the results of the study, the EPA determined that no cleanup actions were required at the site to address the contamination of the groundwater and deleted the site from the NPL in May 1990.

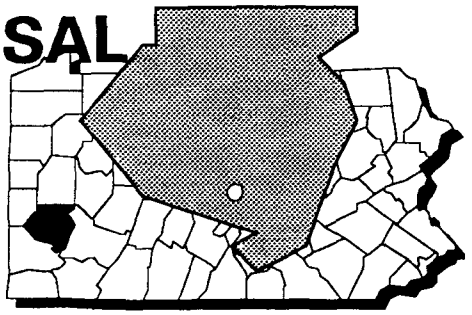
Environmental Progress

The Reeser's Landfill site was intensively studied and was shown not to be the source of the groundwater contamination in the area. The site was deleted from the NPL in 1990.

RESIN DISPOSAL

PENNSYLVANIA

EPA ID# PAD063766828



EPA REGION 3

CONGRESSIONAL DIST. 20

Allegheny County
In Jefferson Borough near the
Monongahela River

Other Names:
Pennsylvania Industrial Chemical Company
Hercules Inc. - PICCO Resins

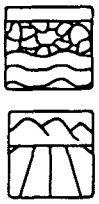
Site Description

The 26-acre Resin Disposal site is privately owned and consists of two unlined, diked ponds and a 2-acre landfill situated in a gully between two residential areas. From 1949 to 1964, these ponds received about 85,000 tons of industrial waste that contained organic solvents, resin cakes, filter materials, and oils from a resin manufacturing process. The ponds were filled and covered with soil. Some of the monitoring wells and leachate seeping from the site are contaminated with organic chemicals. The landfill is located in a strip mine valley and was created by constructing an earthen dike across the floor of the valley. When the area behind the dike was filled with waste materials, a second dike was constructed 250 feet farther down the valley from the initial dike. Although access to the site is restricted, there is evidence that people trespass on it. Approximately 50 people live within 1/2 mile of the site, but about 25,000 people reside within a mile. All but four residences use municipal water. The site lies 1/2 mile from the Monongahela River.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



On-site groundwater is contaminated with volatile organic compounds (VOCs) including benzene and toluene from former disposal practices. Sludges are polluted with VOCs and heavy metals including lead, arsenic, cadmium, and selenium. Threats to human health include direct contact with leachates and airborne soil on the site. The owner of one well refused to test water that is believed to be used for drinking.

Cleanup Approach

This site is being addressed in two stages: an immediate action and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Action: The parties potentially responsible for the site contamination installed a leachate collection system in 1973 and upgraded it in 1983.

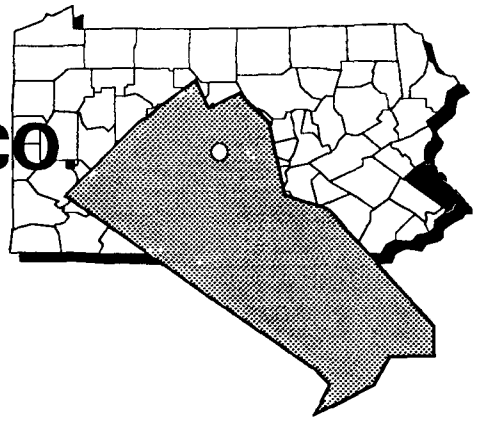
Entire Site: Under the EPA's monitoring, the potentially responsible parties are conducting an intensive study of site conditions. The investigation will explore the nature and extent of contamination problems and will recommend the best strategies for final cleanup of wastes and contaminated soil. The decision on cleanup actions is expected to be made in mid-1991. If necessary, a second phase will be added to address groundwater cleanup.

Site Facts: The Commonwealth of Pennsylvania successfully negotiated a Consent Order in November 1987 with the potentially responsible parties, whereby they agreed to perform a study to identify the nature and extent of contamination.

Environmental Progress

By installing and upgrading a leachate collection system, exposure to hazardous materials at the Resin Disposal site is less likely while investigations take place and cleanup activities are being planned.

REVERE CHEMICAL CO.
PENNSYLVANIA
EPA ID# PAD051395499



EPA REGION 3
CONGRESSIONAL DIST. 08
Bucks County
Off Route 611, just north of Route 412 in Nockamixon Township

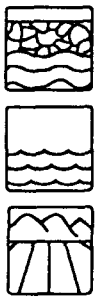
Site Description

The 111-acre Revere Chemical Co. facility, located near Routes 611 and 412 , was an acid, metal, and plating waste processing operation also suspected of accepting organic solvent waste. While the plant operated, wastes containing chromic acid, copper sulfate, and other heavy metals, as well as sulfuric acid and ammonia, were stored on site in unlined earthen lagoons. A U.S. District Court ordered the facility to close in 1969 for causing contamination of a tributary of Rapp Creek. The company abandoned full and empty drums, waste-filled lagoons, and piles of solid waste. In 1970, the Pennsylvania Department of Health (DOH) treated and removed 3 million gallons of liquid wastes. About 520 people reside within a mile of the site, with the closest home being less than 1/4 mile away. There are approximately 650 private wells within 3 miles of the site, the nearest one being 1,000 feet away. The area surrounding the site includes recreational streams, forests, fields, and State game lands. The Delaware River is 7 miles from the site and is a water supply source for Philadelphia.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/85
Final Date: 07/01/87

Threats and Contaminants



The groundwater has been found to contain volatile organic compounds (VOCs) and heavy metals including nickel, lead, and arsenic from former metal plating process wastes. Sediments on the site are contaminated with benzoic acid, and heavy metals and VOCs, polycyclic aromatic hydrocarbons (PAHs), and plastics have been detected off the site. The soil and surface water contain contaminants similar to those found in the groundwater and sediments, as well as mercury, cadmium, and phthalates. Potential health threats include accidental ingestion of contaminated groundwater, surface water, soils, and sediment. Direct contact with contaminated surface water and eating fish, waterfowl, or other wildlife from the contaminated area also can be a threat to health.

Cleanup Approach

The site is being addressed in two stages: emergency actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Emergency Actions: In 1970 to 1971, the Pennsylvania DOH consolidated drummed materials in the lagoons, treated them with lime, pumped out about 3 1/2 million gallons of waste, and then removed them. About 1,000 empty drums were crushed and buried on site. In 1984, an EPA emergency team removed 22 drums of waste chromic acid and excavated 30 cubic yards of sludge containing copper and chromium. All materials were sent to an EPA-approved hazardous waste facility. Site conditions were stabilized, and all readily accessible hazardous substances were removed.

Entire Site: The parties potentially responsible for site contamination, under EPA monitoring, currently are undertaking an intensive study of problems at the site. The study will determine the nature and extent of contamination and will identify alternatives for cleanup. The study is scheduled to be completed in 1992. The EPA is reviewing the first phase of this investigation. Once the review has been completed, the EPA will select a cleanup remedy.

Site Facts: The EPA executed a Consent Order with the potentially responsible parties in 1988 to conduct a study into site contamination at the Revere Chemical Co.

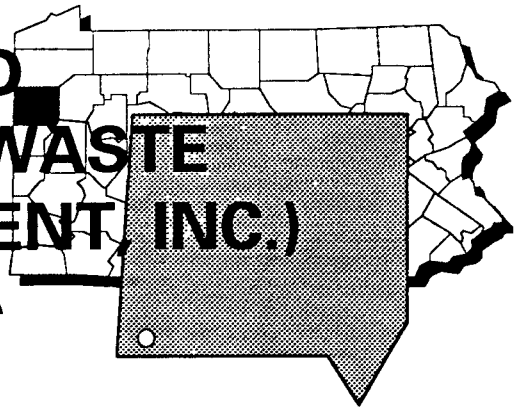
Environmental Progress

The immediate removal of the contaminated drums and wastes at the Revere Chemical Co. site has reduced the potential for exposure to hazardous materials and has made the site safer while it awaits further cleanup activities.

RIVER ROAD LANDFILL (WASTE MANAGEMENT, INC.)

PENNSYLVANIA

EPA ID# PAD000439083



EPA REGION 3

CONGRESSIONAL DIST. 24

Mercer County
South Pymatuning and
Hermitage Townships

Other Names:
River Road Enterprises
Erie Disposal Company

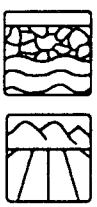
Site Description

The 102-acre River Road Landfill site is an inactive landfill that operated from 1962 until 1986. The landfill accepted municipal and industrial wastes, including foundry and metal processing waste, polychlorinated biphenyl (PCB) wastes, asbestos, and residues from tank car cleaning. Ownership of the landfill has been transferred over the years; the current owner, Waste Management of Pennsylvania, Inc. (WMPA), purchased it in 1980. Although WMPA considered using the landfill for the disposal of hazardous wastes, only non-hazardous industrial wastes were disposed of. The State has fined WMPA for several waste disposal violations, including discharging leachate into surface waters and operating a solid waste disposal area without a permit. The facility received a permit in 1984 for solid waste disposal but stopped receiving waste in May 1986. Closure activities in 1987 were comprehensive, and the site now is fenced, and access is restricted. Approximately 4,500 people live within a mile of the site, and 9,000 people live within 3 miles. The closest residents live less than 1/2 mile away. Two sedimentation ponds catch runoff from the site. These ponds have controlled spillways draining into the Shenango River, next to the landfill's southern border. This river is a water source for 75,000 industrial, commercial, and residential customers in Pennsylvania and Ohio, and the Shenango Valley Water Company's water intake is 2 miles downstream of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 10/04/89

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs) and lead from wastes disposed of at the landfill. Soil in diversion ditches draining to the Shenango River contains detectable amounts of PCBs and other phenolic compounds. People may be at risk if they accidentally ingest or come in direct contact with contaminated groundwater or soil.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: In 1987, WMPA carried out a landfill closure program that entailed placing a cap over the landfill to keep rainwater and runoff from spreading contaminants, installing a leachate collection system and a groundwater dam, controlling erosion and sedimentation, revegetating the site, and fencing the area.

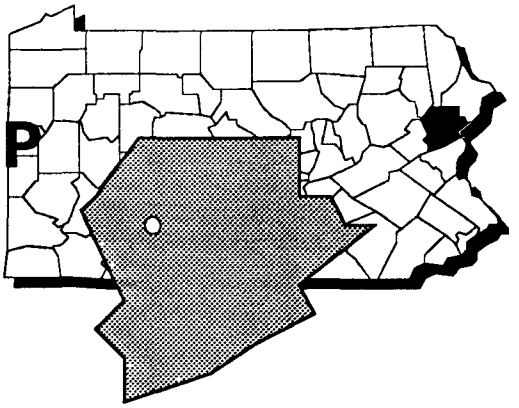
Entire Site: Under EPA supervision, WMPA is currently undertaking an intensive study of problems at the site. The investigation will explore their nature and extent and will recommend the best approaches for final cleanup. It is scheduled to be completed in 1993.

Site Facts: The EPA sent notice letters to the potentially responsible parties in 1989. The EPA and WMPA signed a Consent Order in 1990, in which WMPA agreed to conduct a study of the site.

Environmental Progress

The actions associated with the landfill closure described above reduced the potential for exposure to hazardous wastes and stabilized conditions at the River Road Landfill site while studies are being conducted that will lead to final cleanup activities.

ROUTE 940 DRUM DUMP
PENNSYLVANIA
EPA ID# PAD981034630



EPA REGION 3
CONGRESSIONAL DIST. 11
Monroe County
Pocono Summit in Tobyhanna Township

Other Names:
Pocono Summit

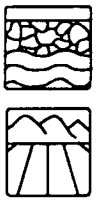
Site Description

In the 1970s, as many as 600 drums of unknown materials were stored on the 2 1/2-acre Route 940 Drum Dump site in Pocono Summit. In early 1983, the State was informed that some drums may have been buried on site. Later that year, the State detected volatile organic chemicals (VOCs) in on-site soils. Several organic chemicals also were detected in on-site groundwater. Thirty buried drums containing VOCs and heavy metals subsequently were discovered. Access to the site is restricted by a fence. Approximately 4,200 people depend on private wells and small public wells within 3 miles of the site as their sole source of drinking water. Indian River Creek, about a mile from the site, is used for fishing. Recreational fishing and hunting occur in the area surrounding the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/85
Final Date: 07/01/87

Threats and Contaminants



The groundwater and soil are contaminated with various VOCs that have leaked from buried drums on the site. The possibility of high concentrations of VOCs in the soil being transmitted through the air poses a threat to area residents. In addition, direct contact with contaminated areas or contamination of the drinking water supply may pose a risk to the nearby public. The potential for fire or explosion of volatile gases at the site also is of concern.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: Under State supervision in 1983, the potentially responsible parties installed monitoring wells, excavated and removed 100 drums, and stockpiled contaminated soils on site. In 1983 to 1984, the EPA carried out an emergency removal of buried containers suspected to contain pathogenic organisms. Also, the EPA removed 131 full bottles and hundreds of broken containers from the site and disposed of them in an approved landfill. Ten drums of non-hazardous waste also were landfilled. The stockpiled soil was treated with a soil shredder and was rendered neutral in 1988.

Entire Site: In 1989, the potentially responsible parties began an intensive study of site contamination. In 1990, the EPA took over the investigation. This investigation is exploring the nature and extent of soil and groundwater problems and will recommend the best strategies for final cleanup. It is slated for completion in 1991. Once this phase of the cleanup process has been completed, the EPA will evaluate the investigation findings and will select final cleanup strategies for the remaining site contamination.

Site Facts: In 1987, the State of Pennsylvania and the potentially responsible parties signed a Consent Order to conduct a study into the site contamination. In 1990, the EPA took over the investigation from the potentially responsible parties because of delays in their performance of the work.

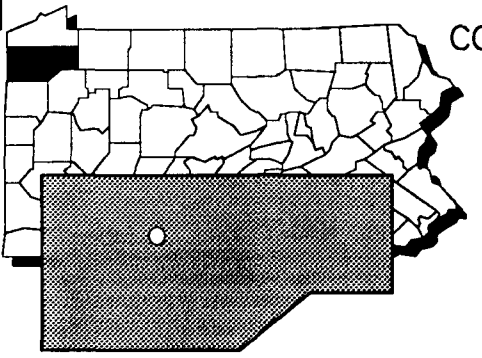
Environmental Progress

The removal of contaminated soil, drums, and other containers from the site by the potentially responsible parties and the EPA, in addition to fencing the site, have removed the source of site contamination, reducing the potential for contamination of water supplies from the Route 940 Drum Dump site while further investigations and cleanup activities are being planned.

SAEGERTOWN INDUSTRIAL AREA

PENNSYLVANIA

EPA ID# PAD980692487



EPA REGION 3

CONGRESSIONAL DIST. 24

Crawford County

Saegertown

Other Names:
Saegertown Borough
Saegertown Well #2

Site Description

The Saegertown Industrial Area site covers about 100 acres that contain several industrial operations. In 1980, State analysts discovered volatile organic compounds (VOCs) in the Saegertown Municipal Water Authority's Well #2. Several potential sources of VOCs and lead contamination have been identified on site. GATX cleaned and repaired railroad tank cars here from the mid-1950s to 1965, disposing of wash water, solvents, sludge, and tanker waste on site. EPA tests in 1984 found VOCs and polycyclic aromatic hydrocarbons (PAHs) in on-site pond sediments and soil. On-site monitoring wells also revealed contamination from lead and other heavy metals. Saegertown Manufacturing Co. has produced small steel components in the area since 1964. In 1981, the Commonwealth detected lead and VOC products in the company's septic tank and on-site wells. Since 1969, Spectrum Control, Inc. manufactured ceramic capacitors here, using VOCs in the cleaning process. VOCs also were found in on-site monitoring wells. The Lord Corporation produced adhesives, urethane coatings, and "rubber chemicals" on the site. Manufacturing processes use various VOCs. Other potential sources have been identified and currently are being evaluated. Approximately 1,200 people draw drinking water from municipal wells and a private well within 3 miles of the site. There are approximately 3,400 people living within a 3-mile radius of the site, and 1,100 people live within a 1-mile radius.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 02/21/90

Threats and Contaminants

The town's municipal well was contaminated with various VOCs; on-site monitoring wells and industrial septic tanks also are contaminated with heavy metals including lead. The well was removed from service, but was put back into use again in 1984 because the contamination levels have fallen below the levels of health concerns. Soil and pond sediments are polluted with VOCs and PAHs. Possible health threats include accidentally ingesting or coming into direct contact with contaminated soils, groundwater, and surface water. Since access to the site is open, workers and trespassers are most at risk. Ten to 20 acres of farmland in the area are irrigated with well water.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: In 1990, the parties potentially responsible for the site contamination began conducting an investigation into the nature and extent of contamination at the site. Selection of the final cleanup remedy is expected in 1992.

Site Facts: A Consent Order between the EPA and the potentially responsible parties was signed on January 31, 1990, requiring the potentially responsible parties to conduct site investigations.

Environmental Progress

After adding this site to the NPL, the EPA performed preliminary site evaluations and determined that the Saegertown Industrial Area site does not pose an immediate threat to the public or the environment while waiting for cleanup activities to begin.

SALFORD QUARRY

PENNSYLVANIA

EPA ID# PAD980693204

EPA REGION 3

CONGRESSIONAL DIST. 05

Montgomery County

On Quarry Road in Lower Salford Township

Other Names:
American Olean

Site Description

The 3-acre Salford Quarry is an abandoned stone quarry, purchased for waste disposal in 1963 by American Olean Tile Company, a subsidiary of the National Gypsum Company. Waste tiles, unfused tile slurry, and other production wastes were disposed of at the site until 1980, when the State received complaints that tanks were buried there. In 1981, the owner discovered two 10,000-gallon tanks containing boron and fuel oil. After the company pumped out the oil, the site officially was closed in 1982, in accordance with a State-approved plan. Approximately 54,000 people draw drinking water from public and private wells within 3 miles of the site. Three private wells exist near the site, but most local residents receive water from a public supply. A private well 650 feet from the site contains high concentrations of boron contamination.

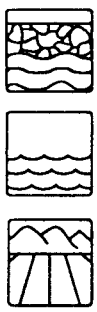
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 08/30/90

Threats and Contaminants



Small amounts of volatile organic compounds (VOCs) and heavy metals including arsenic and cyanide and large amounts of boron from former waste disposal practices have been detected in the groundwater. A nearby spring contains VOCs and various heavy metals that are contaminating the soil. Possible health risks include the ingestion of or direct contact with contaminated groundwater, surface water, or soil.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on soil and groundwater cleanup at the site.

Response Action Status

Immediate Actions: The site was closed in 1982. The closure plan involved installing a soil cap, grading, and revegetating the site.

Soil and Groundwater: Under an agreement with the EPA, the parties potentially responsible for the site contamination are conducting an intensive study of soil and groundwater contamination. The investigation will evaluate the nature and extent of the pollution and will identify the best cleanup strategies. This study is slated for completion in 1992.

Site Facts: American Olean signed a Consent Agreement in 1988 to conduct a study of the site and its contamination. The potentially responsible parties contended that VOCs were not part of their manufacturing wastes.

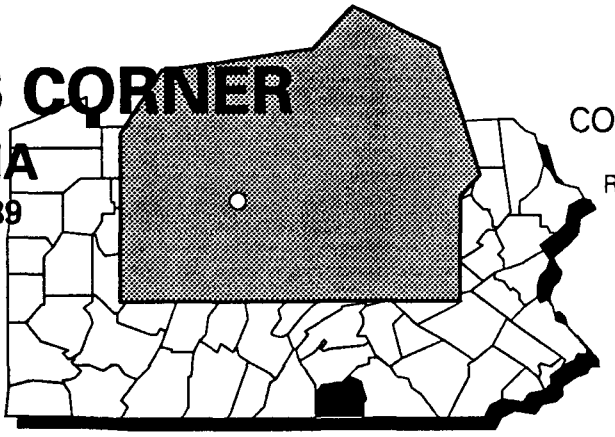
Environmental Progress

The actions performed by the potentially responsible parties during closure of the site stabilized the Salford Quarry site and eliminated immediate threats to nearby residents and the environment while studies and cleanup activities are taking place.

SHRIVER'S CORNER

PENNSYLVANIA

EPA ID# PAD980830889



EPA REGION 3

CONGRESSIONAL DIST. 19

Adams County

Route 394 in Straban Township

Other Names:
Culp Property
Westinghouse #1 & #4

Site Description

The Shriver's Corner site is composed of two areas covering about 10 acres. Both areas have accepted drums of liquid wastes from the Westinghouse Elevator Plant, a site in Cumberland Township that also is on the NPL. Westinghouse workers disposed of drums containing volatile organic compounds (VOCs). Liquid wastes, paint sludges, solvents, and VOCs reportedly were dumped at the southern edge of the property. Approximately 5,000 people use wells within 3 miles of the site as a source of drinking water. Approximately 250 people live within a mile of the site; the nearest residence is 100 feet away, and the nearest well is 10 feet from the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants

The groundwater is contaminated with VOCs including toluene and xylene from former waste disposal practices. Threats to the public include drinking contaminated well water and coming into direct contact with any remaining contaminated wastes left on the site. Westinghouse has provided carbon filters for affected residential wells in the area.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on groundwater cleanup at the site.

Response Action Status

Immediate Actions: In 1984, Westinghouse removed about 80 surface drums and 250 cubic yards of contaminated soils and sent the materials to an EPA-approved disposal site. A 2-inch soil cover was placed in the Shealer area of the site. The company also provided carbon filters for some residential wells. These actions eliminated the immediate threats to the affected public and are controlling further site contamination.

Groundwater: Under EPA supervision, Westinghouse is conducting an intensive study into groundwater contamination at the site. This investigation, scheduled for completion in 1992, will explore the nature and extent of the problem and will identify the best approaches for final cleanup.

Site Facts: In April 1984, under a Consent Order, Westinghouse removed drums and soils and provided well filters. Westinghouse agreed to conduct the investigation of the site contamination under a Consent Order with the EPA signed in March 1987.

Environmental Progress

By removing contaminated drums and soil, providing well filters to affected residents, and placing a cap on soils, Westinghouse and the EPA have reduced the risk of exposure to contaminants for residents near the Shriver's Corner site while investigations are taking place and cleanup activities are being planned.

STANLEY KESSLER
PENNSYLVANIA
EPA ID# PAD014269971

EPA REGION 3
CONGRESSIONAL DIST. 13
Montgomery County
King of Prussia

Other Names:
Weldwire Kessler
Kessler Stanley & Co. Inc.

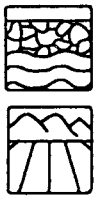
Site Description

Metal recycling operations were carried out in the one building of the Stanley Kessler site in King of Prussia from the 1960s through the early 1980s. Workers disposed of cooling water contaminated with organic solvents in an underground septic tank and into a cesspool with no structural bottom. An "acid waste neutralization system" was used on site prior to 1963. The site currently is an active wire respooling facility. Organic compounds like trichloroethylene (TCE) and tetrachloroethene were detected in the Upper Merion Reservoir about 1/2 mile away from the site. The reservoir is a major source of drinking water for the Philadelphia Suburban Water Company, which serves an estimated 800,000 people. The EPA filed suit against the company in 1980, citing violations of environmental laws governing waste disposal and drinking water. Approximately 5,000 people live within a mile of the site. A school is located about 2,000 feet south of the site. The area surrounding the site is industrial, with private residences situated beyond the neighboring industrial facilities.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



Groundwater on site is contaminated with volatile organic compounds (VOCs) including TCE from the former waste disposal practices. On-site soils also were found to contain VOCs including ethyl benzene, methylene chloride, and toluene. VOCs have been detected in the drinking water reservoir. People may be at risk by drinking contaminated groundwater or by accidentally ingesting or coming in direct contact with contaminated soil. Environmental exposure also is possible if the adjacent stream receives contaminated runoff from the site.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1981, Stanley Kessler removed liquid wastes and 60 to 80 cubic yards of contaminated soil from the cesspool and septic tank and removed them from the site. The tank areas then were backfilled. The company also has drilled five monitoring wells on the site. In 1984, the company installed a small groundwater recovery and treatment system on site. The company has conducted limited groundwater monitoring since 1985.

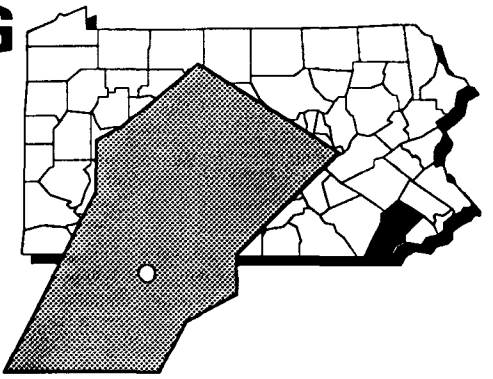
Entire Site: The Stanley Kessler Company, under EPA monitoring, will begin an intensive study of site contamination as ordered under a 1991 Consent Decree.

Site Facts: In January 1991, the EPA issued a Consent Decree to the potentially responsible parties to perform site studies and to pay for past costs associated with the site.

Environmental Progress

The removal of the contaminated soil and liquid waste and the installation of a groundwater treatment system have reduced the potential for exposure to or migration of contaminated materials at the Stanley Kessler site while studies leading to a final selection of the cleanup alternatives are taking place. The EPA has determined that contamination at the site currently does not pose an immediate threat to neighboring residents or the environment.

STRASBURG LANDFILL
PENNSYLVANIA
EPA ID# PAD000441337



EPA REGION 3
CONGRESSIONAL DIST. 13
Chester County
Near Coatsville in West Bradford
and Newlin Townships

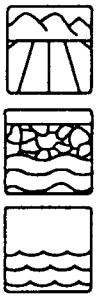
Site Description

The 222-acre Strasburg Landfill site was bought in 1973 by Strasburg Associates and received a permit in 1975 to accept municipal wastes. Strasburg Landfill Associates purchased the site in 1978 and eventually began operations, using 22 acres near the center of the site. In 1979, the landfill was licensed to receive industrial waste under a new permit. Records show that Diamond Shamrock Chemicals Company sent 500 to 600 tons of polyvinyl chloride (PVC) wastes to the landfill in 1979, and that Gichner Mobile Systems disposed of heavy-metal sludge there. The Commonwealth prohibited the landfill from receiving an industrial waste permit in 1980. Early in 1983, the Commonwealth found volatile organic compounds (VOCs) and heavy metals in on-site monitoring wells and various VOCs in an off-site private well downgradient of the landfill. The same contaminants were discovered in liquids leaching from the site. In 1983, the Commonwealth closed the operation. The site is in a rural area. About 800 people draw drinking water from municipal wells within 3 miles of the landfill; however, the homes downgradient of the site use private wells. The Brandywine Creek flows within 1/2 mile from the landfill. Briar Run Creek, which flows into the Brandywine Creek, is within 300 feet of the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 03/31/89

Threats and Contaminants



Soil and an on-site well are contaminated with VOCs and heavy metals including lead and copper from former disposal practices. Drinking water in three private off-site wells downgradient of the site contains VOCs. Briar Run Creek contains various VOCs. Consumption of contaminated groundwater and direct contact with contaminated liquids on the site pose potential health risks. Access to the site is unrestricted, making it possible for people and animals to come into direct contact with contaminated liquids.

Cleanup Approach

This site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the entire site, installation of a fence, and on cleanup of the landfill area.

Response Action Status

Immediate Actions: When the landfill was closed in 1983, the parties potentially responsible for the site contamination covered the area with 2 feet of soil above a plastic liner, stabilized the site, and planted it. In addition, they installed a system to collect liquids leaching from the site. Currently, about 8,000 to 11,500 gallons of leachate are collected daily and are treated on-site before being discharged through a permitted outfall.

Entire Site: In 1989, the potentially responsible parties provided an alternate drinking water supply to all homes downgradient of the site with wells found to be contaminated with VOCs, directed discharge from the large seep southeast of the landfill into existing collection systems, and constructed an on-site air stripper system to handle all leachate generated by the collection system.

Fence: In 1991, the EPA determined that a fence was required around 22 acres of the landfill to eliminate direct contact threats. This fence is scheduled to be constructed by the potentially responsible parties.

Landfill: The landfill area is being studied to determine the nature and extent of contamination at the area, as well as to determine the most appropriate measures for reducing risk from the landfill leachate. The study is expected to be completed in 1991.

Site Facts: In June 1989, the EPA issued a Unilateral Administrative Order to the potentially responsible parties to haul the leachate off-site and to provide and install water filters in two residences.

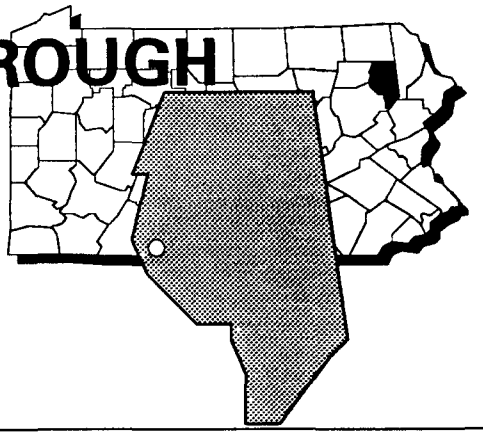
Environmental Progress

The continued daily removal of leachate, the provision of an alternate drinking water supply, and the additional completed cleanup activities have reduced contamination and have limited the potential for exposure to contaminants at the Strasburg Landfill site while other cleanup activities are taking place and studies are being completed.

TAYLOR BOROUGH DUMP

PENNSYLVANIA

EPA ID# PAD980693907



EPA REGION 3

CONGRESSIONAL DIST. 10

Lackawanna County
Taylor Borough, 3 miles south
of City of Scranton

Other Names:
Old City of Scranton Landfill #1

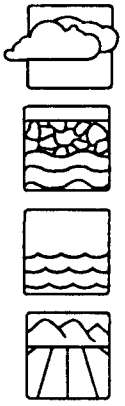
Site Description

Taylor Borough Dump is a privately owned, inactive landfill that covers 125 acres in Taylor. The City of Scranton, located about 3 miles north of the site, used the former underground and strip mine as a municipal dump from 1964 through 1968. The unfenced site was placed on the NPL because approximately 1,200 drums containing hazardous organic chemicals and heavy metals had been dumped illegally there. Drums were found in six main areas on the site. Wastes had escaped from the drums and contaminated the soil, surface water, sediments, groundwater, and the surrounding air. Even after the EPA built a fence around the area, trespassers breached it to bike, jog, and hunt on the site. The landfill is near a residential area and a community park. It is estimated that 1,000 people live within a 1-mile radius of the site, and 10,000 people live within 3 miles of the site. A residential development borders the southeastern edge of the landfill, but the nearest dwelling is several hundred feet from the closest area used for drum waste disposal. Residents obtain water from a surface water supply that does not receive runoff from the site.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants



Ambient air on the site and at a nearby residence showed the presence of volatile organic compounds (VOCs) and chlordane, a pesticide. There was a potential for methane and waste-contaminated gases to migrate to nearby residences. Contaminants in the groundwater on site included phthalic acid esters, polychlorinated biphenyls (PCBs), chlordane, and arsenic. Contaminants detected in sediments included antimony, arsenic, lead, and PCBs. On-site soils contained phthalic acid esters, polycyclic aromatic hydrocarbons (PAHs), arsenic, and lead. Off-site surface water contained lead, chlordane, and PCBs. People who came in direct contact with, inhaled, or accidentally ingested contaminants were at risk. Residents using ponds located on the site for recreation and fishing may have been at risk from contact with contaminated water or from eating contaminated fish.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on source control and groundwater monitoring.

Response Action Status

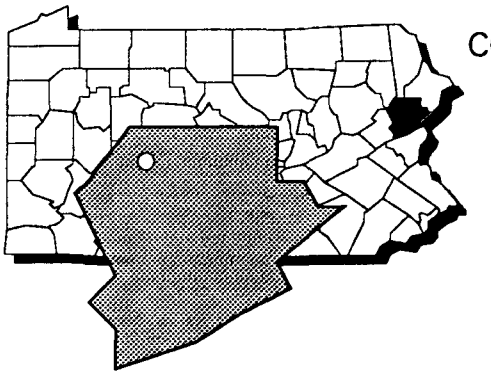
Immediate Actions: In 1983, the EPA removed 250 tons of hazardous solids and 1,595 gallons of liquid, as well as approximately 850 drums from the site. Workers built security gates across the roads to prevent unauthorized dumping and vehicular access. In 1987, the EPA conducted a removal operation that featured disposal, drum repacking, organization of materials, control of contaminant movement, excavation, security, restoration, and sampling.

Source Control and Groundwater Monitoring: Two separate remedies were selected for this site. One focused on the removal and disposal of wastes and contaminated materials, and the other focused on groundwater monitoring. Source Control: the selected remedy featured removal and off-site disposal of 125 drums and remnants; collection and treatment of contaminated water in ponds; excavation and off-site disposal of contaminated soils; and construction of a soil cover over the area. This cleanup work was completed in 1988. Groundwater Monitoring: source control actions were considered so effective in preventing the release of contaminants to the groundwater that no groundwater cleanup was required. The EPA allowed the parties potentially responsible for the site contamination to move directly to a groundwater monitoring program to verify that continued contamination is not occurring. In addition, the EPA and the State are conducting operation and maintenance of the cover, as well as groundwater monitoring, using a fund set up by the EPA with money from the potentially responsible parties.

Environmental Progress

Numerous cleanup actions have been completed at the Taylor Borough Dump, including the removal of hazardous solids and liquids and drums. The source control actions proved to be effective in eliminating contaminants from entering the groundwater, and no further actions were required. In preparation for deleting the site from the NPL, EPA and the State are monitoring the groundwater to ensure that no further contamination results from the site.

TOBYHANNA ARMY DEPOT
PENNSYLVANIA
EPA ID# PA5213820892



EPA REGION 3
CONGRESSIONAL DIST. 10
Monroe County
Tobyhanna

Site Description

The Tobyhanna Army Depot site is a communication-electronics maintenance and supply facility assigned to the U.S. Army Depot System Command. The 2 square miles on which the site is located include landfills, a manufacturing area, and other disposal areas. Two pits were used to dispose of solvents and waste oils through burning activities. The pits subsequently were filled in with soil and were revegetated. Groundwater on and off site has been shown to be contaminated from past disposal practices. Approximately 4,000 people live within a 3-mile radius of the site.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 07/14/89
Final Date: 08/30/90

Threats and Contaminants

Specific contaminants detected in the on- and off-site groundwater and soil include trichloroethylene (TCE) and lead. Drinking contaminated groundwater poses a threat to the health of area residents. There are wetlands adjacent to the site, and wildlife also may be affected by contaminants from the site.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status

Immediate Actions: The Army is providing bottled drinking water to 65 homes in the site area. The Army awarded a contract in 1991 to extend a permanent water line to those homes now being provided bottled water. The estimated completion date of the project is late 1991.

Entire Site: Pilot tests are underway to examine contamination in surface soils. In addition, a study on groundwater treatment is being conducted by the Army. In 1990, the Army began an intensive study of the site, to explore the nature and extent of groundwater contamination and to recommend cleanup strategies. The investigation is scheduled for completion in 1992.

Site Facts: A Federal Facilities Agreement, which outlines how the Army and the EPA will proceed in investigating the site, has been signed. The Tobyhanna site is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities.

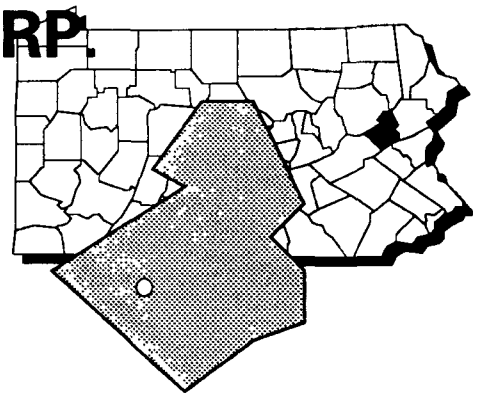
Environmental Progress

The Army's provision of an alternate drinking water source has reduced the immediate threat of exposure to contaminants while studies are being conducted and a final remedy selection is made at the Tobyhana Army Depot site.

TONOLLI CORP.

PENNSYLVANIA

EPA ID# PAD073613663



EPA REGION 3

CONGRESSIONAL DIST. 06

Carbon County

Along Rte. 54 in Nesquehoning

Site Description

The Tonolli Corp. site is situated on 20 acres and operated as a lead battery recycling facility between 1974 and 1985. The recycling operations included crushing the batteries and recovering the lead and plastics from them. The site has a lined landfill containing about 84,700 cubic yards of waste and a surface impoundment for storing contaminated water from plant operations. In 1985, the owner and the State detected arsenic and cadmium in on-site monitoring wells. The same year, Tonolli filed for bankruptcy. The EPA completed a preliminary assessment of the site in 1987 and identified it as a candidate for emergency response action. The site is in a valley, in a sparsely populated area. An estimated 13,000 people obtain drinking water from the Lansford/Coaldale Joint Water Authority wells within 3 miles of the site. The nearest well is within a mile of the site. Nesquehoning Creek, which is adjacent to the site property, has been contaminated with heavy metals since 1985.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 06/16/88

Final Date: 10/04/89

Threats and Contaminants

Arsenic, cadmium, lead, and chromium from the former recycling operations have been found in on-site soils and monitoring wells. Nesquehoning Creek also contains levels of arsenic, cadmium, and lead. Drinking water supply wells potentially could be threatened by contamination from the site. Contaminated soils and battery casings remaining on the site. Potential threats to trespassers include accidental ingestion or direct contact with contaminated water, soil or debris.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1989, the EPA completed removal actions involving the excavation and treatment of liquids and sludges in a lagoon, treatment and disposal of liquids in the site's storage tank, construction of a surface water collection and treatment system, and repair of the fence to limit site access. The site conditions were stabilized, hazardous substances were removed, the lagoon was filled, the area was regraded, and security measures were taken.

Entire Site: The potentially responsible parties are performing an intensive site study, under EPA monitoring. This investigation will determine the nature and extent of contamination at the site and will recommend cleanup strategies. The first phase of the investigation was completed in 1990. A second round of limited sampling is planned for late 1991. A report summarizing all results will be delivered after the study is completed, at which time the EPA will select the final remedies.

Site Facts: In 1989, the EPA executed a Consent Order with 46 potentially responsible parties for a study to determine the nature and extent of contamination and to identify alternatives for cleanup.

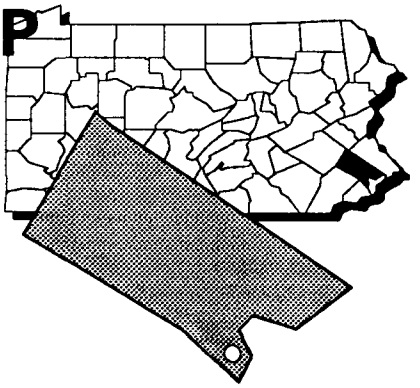
Environmental Progress

The timely removal of contaminated liquids and sludges from the site and the construction of a water collection and treatment system have reduced the potential for exposure to hazardous materials at the Tonolli Corp. site while it awaits results of the investigation into cleanup alternatives and the final selection of a remedy for cleanup of the site.

TYSONS DUMP

PENNSYLVANIA

EPA ID# PAD980692024



EPA REGION 3
CONGRESSIONAL DIST. 13
Montgomery County
Upper Merion Township

Site Description

This privately owned dump, a former sandstone quarry, covers 4 acres in Upper Merion Township. The site received wastes from 1962 to 1970; both septic and chemical wastes were disposed of in a series of unlined lagoons. In the 1970s, sludges and liquid wastes, primarily chlorinated and other organic solvents, were dumped into the lagoons. Water leaching from the site flowed into the nearby Schuylkill River, which provides drinking water to more than 30,000 people in Norristown and other communities. The State ordered the facility closed in 1973. During closure, the lagoons reportedly were emptied of standing water, backfilled, vegetated, and the contents were transported off site, although contaminated soils remained on site. In early 1983, the EPA received a citizen complaint about noxious odors emanating from the site; an investigation determined that immediate removal measures were necessary. An estimated 26,000 people live in the residential area of Upper Merion. Water intakes for Norristown and Philadelphia are downstream of the site on the Schuylkill River. The site regularly has been used for motorbiking and other recreation. Approximately 1,000 people live or work within 1/4 mile of the site.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants

Volatile organic compounds (VOCs) were found in air sampled by the State. Groundwater and soils on the site are contaminated with chlorinated and other organic solvents including benzene, xylene, and chlorobenzene. Surface water was contaminated with trichloropropane. Possible health risks include coming in direct contact with, inhaling, or accidentally ingesting contaminated soil. No drinking water wells exist between the site and the Schuylkill River, so groundwater ingestion is unlikely. A wetland and deep aquifer are threatened by contaminant runoff from the site.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on soil cleanup and cleanup of the groundwater.

Response Action Status

Emergency Actions: In 1983, the following emergency responses were performed by the EPA: monitoring wells were installed, a leachate collection and treatment system were constructed, and a security fence was erected around the lagoon areas, which also were covered with a soil cap. Portions of the site were reseeded and regraded to control drainage. The threat of direct contact with contaminants on site has been reduced through these measures.

Soil: While the lagoons were emptied and backfilled when the dump was closed in 1973, the contaminated soil at the bottom was never removed and continued to pollute the area. Thus, in 1984, the EPA recommended excavation of these materials and disposal at an EPA-approved landfill. The engineering design was begun in spring 1985. However, this approach was suspended in 1987, when Ciba-Geigy and other parties potentially responsible for the site contamination proposed financing a different cleanup strategy. This proposal formally became the selected on-site remedy and includes an innovative soil-cleaning technology called vacuum extraction, in place of excavation. Full-line start-up of the soil vacuum extraction system began in fall 1988, but in early 1989, the well screens became clogged with a tar-like substance. Later in 1989, the EPA evaluated the feasibility of screen cleaning by steam injection and solvent washing and changed the screen cleaning method to hot air injection. This method and solvent washing appear to be keeping the well screens open. The EPA has been monitoring progress, and target cleanup levels have not yet been met. Therefore, the Agency is considering an extension of the cleanup period.

Groundwater: In the fall of 1988, the EPA chose pumping and treating groundwater as the remedy for off-site contamination. The groundwater is being pumped and treated by a steam stripping system to remove contamination. The off-site groundwater treatment system began operating in the fall of 1989. After additional study, in 1990, the EPA determined that there was a need to install additional extraction wells along the southern bank of the river and Barbadoes Island in the middle of the river. The engineering design of this part of the remedy is underway and is expected to be completed in 1993. Additional studies of the groundwater are ongoing.

Site Facts: A partial Consent Decree was signed in June 1988 by the EPA, the Pennsylvania Department of Environmental Resources, Ciba-Geigy Corp., Wyeth Labs, Smith-Kline Beckman Corp., and Essex Group, Inc. to conduct the cleanup of the site.

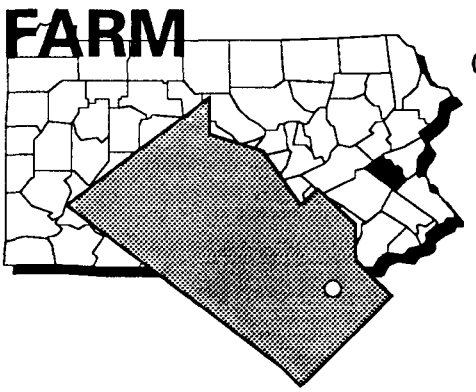
Environmental Progress

The numerous emergency actions taken at the Tysons Dump site immediately addressed the areas of greatest concern while further cleanup technologies were studied and designed. The soil and groundwater cleanup systems currently are operative, and their effectiveness will be closely monitored by the EPA.

VOORTMAN FARM

PENNSYLVANIA

EPA ID# PAD980692719



EPA REGION 3

CONGRESSIONAL DIST. 15

Lehigh County

Upper Saucon Township, 1 mile southwest of Ladark

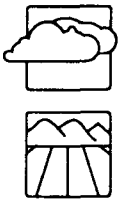
Site Description

The contamination area on the 43-acre Voortman Farm consisted of a large sinkhole, measuring 48 feet wide by 100 feet deep. When the site was placed on the NPL in 1982, it was reported that 10,000 battery casings had been dumped into the sinkhole. The State detected elevated concentrations of heavy metals in the sinkhole in 1983. Analyses of nearby domestic wells showed heavy metals below maximum permissible limits. A fire in the sinkhole in the fall of 1986 was extinguished by the State. The area surrounding the site is primarily agricultural. About 9,700 people live in Upper Saucon Township. The closest dwellings are to the west of the site, along Vera Cruz Road. A public golf course is located toward the southeastern end of the Voortman Farm.

Site Responsibility: This site was addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 06/01/89

Threats and Contaminants



The air may have been temporarily contaminated with lead during the sinkhole fire in 1986, and people may have been exposed to airborne lead at the time of the fire. Battery casings contaminated the soil prior to excavation of the wastes and soil.

Cleanup Approach

The site has been addressed in two stages: emergency actions and a single long-term remedial phase focused on cleanup of the entire site.

Response Action Status

Emergency Actions: The State hired contractors to excavate the sinkhole and to remove the burning battery cases. The fire was extinguished within a month. After the fire was extinguished in 1986, the State managed the excavation of the sinkhole and the removal of 230 cubic yards of wastes and contaminated soil to an authorized landfill. This action resulted in the elimination of the sources of contamination.

Entire Site: Studies conducted in 1987 and 1988, which included sampling of residential tap water, soil, and surface water, demonstrated that the 1986 cleanup had been effective. The EPA selected the remedy "No Action, with continued monitoring" in 1988, and the site was deleted from the NPL on June 1, 1989. The State of Pennsylvania will continue to monitor the site to ensure the absence of contaminants. The monitoring program is expected to be completed by 1993.

Site Facts: Citizens' complaints in 1980 prompted the immediate prohibition of dumping at the Voortman Farm and the subsequent site investigation.

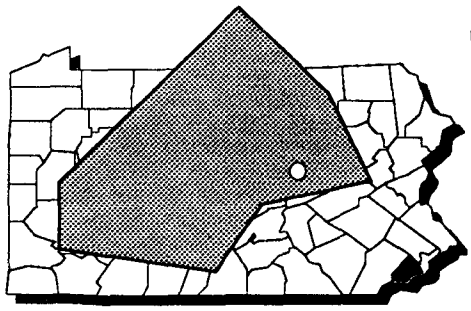
Environmental Progress

The State and the EPA have been successful in removing all sources of contamination from the sinkhole on the Voortman Farm site. As a result of these actions, the EPA, in consultation with the State, has determined that the site no longer poses a threat to human health or the environment and has deleted the site from the NPL. The State will continue to monitor the site to ensure that no further contamination is detected in the area groundwater.

WADE (ABM)

PENNSYLVANIA

EPA ID# PAD980539407



EPA REGION 3

CONGRESSIONAL DIST. 05

Delaware County

Delaware River in Chester, 9 miles south of Philadelphia

Site Description

The 3-acre Wade site operated as a rubber recycling facility from around 1950 to the early 1970s, and then was converted to an illegal industrial waste storage and disposal facility. Workers stored drums on site, or dumped their contents either directly onto the ground or into trenches, severely contaminating soil and groundwater. Wastes include toxic chemicals and polychlorinated biphenyls (PCBs), as well as acid and cyanide salts. In 1978, a fire at the operation destroyed one building and caused extensive damage to two others used for stockpiling drummed wastes. Forty-seven firefighters were hospitalized. Burned building debris, exploded drums, tires, shredded rubber, and contaminated earth littered the property. About 150,000 gallons of waste materials remained on site after the fire. Most of the wastes were in 55-gallon drums stored in the fire-damaged buildings. The site is in a light industrial area; the nearest residential area is about 1,000 feet from the site.

Site Responsibility: This site was addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83
Deleted Date: 03/22/89

Threats and Contaminants

The groundwater and soil were contaminated with heavy metals including arsenic, chromium, mercury, and lead; PCBs; plastic resins; and volatile organic compounds (VOCs) from past disposal activities. Since this is an ecologically sensitive area, numerous threats existed not only to area residents and workers, but also to surrounding wetlands, wildlife, and marine animals.

Cleanup Approach

This site was addressed in two stages: emergency actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Emergency Actions: In 1981 and 1982, the EPA undertook two separate emergency actions to clean up this site. Workers removed 5,000 gallons of PCB-contaminated waste and 10,000 gallons of other hazardous wastes for incineration. They also removed 155 tons of contaminated solids.

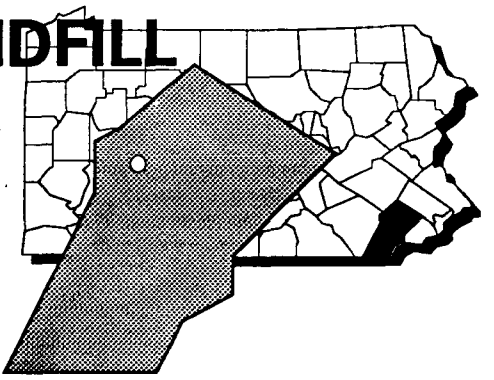
Entire Site: Remedies selected for the site include: the removal, decontamination, and disposal of tires, tankers, waste piles, and buildings; site leveling, filling, and grading; soil removal down to the depth at which the first acceptably contaminated sample is found; and covering the site with topsoil and seeding this soil cover to minimize erosion. The State managed the site cleanup, which started in 1987, and was completed in the same year. The EPA, in conjunction with the State, deleted the site from the NPL in 1989.

Site Facts: In 1985, an enforcement settlement was reached with one of the parties potentially responsible for the site contamination. The State of Pennsylvania and the EPA undertook partial cleanup, and the State completed cleanup activities with the money contributed by the potentially responsible parties.

Environmental Progress

All cleanup activities have been completed at the Wade site, eliminating the threat to human health and the environment. The EPA has determined that the site and its surroundings are now safe, allowing the site to be deleted from the NPL.

WELSH LANDFILL
PENNSYLVANIA
EPA ID# PAD980829527



EPA REGION 3
CONGRESSIONAL DIST. 16
Chester County
On Welsh Road in
Honey Brook Township

Other Names:
Barkman Landfill
Honeybrook

Site Description

The Welsh Landfill site is situated on 8 acres along a forested ridge about 2 miles north of Honey Brook. It was operated as a sanitary landfill from before 1970 until 1977, but no State permit ever was issued for the disposal of solid waste. Investigations in the 1980s revealed that the facility had accepted industrial and hazardous waste, as well as municipal trash, and that several monitoring and domestic wells in the area were contaminated with both organic and inorganic compounds. Abandoned vehicles, appliances, 55-gallon drums, and other debris are scattered over the site. It continues to operate as a solid waste transfer station and salvage yard. Access to the site is virtually unrestricted. The surrounding area is rural and residential, with 300 homes or occupied buildings within a 3-mile radius of the site and 20 residences within 1/2 mile. All use private wells for drinking water. The population within 3/4 mile of the site is about 1,200. The site is bordered to the south by a narrow band of trees, beyond which are farmlands.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants

Sampling of the on-site air indicated the presence of volatile hydrogen chloride and chloroform. The on-site groundwater contains mercury, toluene, and other volatile organic compounds (VOCs) from former disposal practices. Residential well water off site was found to contain chloromethane, chloroform, xylenes, and other VOCs, as well as lead, mercury, and zinc. The sediments off site are contaminated with cadmium and lead. Direct contact with or drinking contaminated groundwater, as well as inhaling volatile contaminants that evaporate from groundwater or that occur in gases or vapors, may threaten the health of those in the area. Trespassers could be exposed to chemicals by coming in direct contact with soils, sediments, or the waste containers remaining on the site.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at providing a safe water supply and cleanup of the groundwater.

Response Action Status

Immediate Action: In 1985, the EPA approved the funds to start removing contaminated materials. The work was divided between the EPA and the owner, who conducted on-site cleanup and disposed of 26 drums. The EPA performed soil sampling and off-site well monitoring to determine the extent of contamination. Drummed wastes were removed from the site. The owner currently is removing the remaining debris and salvage materials. Bottled water has been provided by the State since 1989 to 44 homes.

Water Supply and Landfill: The State conducted a study to determine the nature and extent of contamination and to identify alternatives for cleanup from 1986 to 1990. The EPA's final decision was prepared to address the cleanup of the contaminated drinking water supply and the landfill as a source of contamination. A proposed plan was released in 1990 for public comment, and the final decision calls for the extension of the municipal water line to the affected areas, capping the landfill, resource recovery, and institutional controls. The design of the selected cleanup now is underway. Both the water line and landfill cap design are planned to be completed in 1992. The final cleanup actions will take place once the design of the remedy is completed.

Groundwater: A focused investigation began in 1990 to characterize groundwater flow and to assess remedies for the site. The investigation is scheduled for completion in 1992.

Site Facts: Odor episodes have been reported by local residents. In spring 1990, the EPA issued an Administrative Order to the site owner, requiring him to remove all debris and salvage materials from the surface of the landfill in an environmentally sound manner. The owner is complying with the Order, and the site is expected to be cleared by fall 1991.

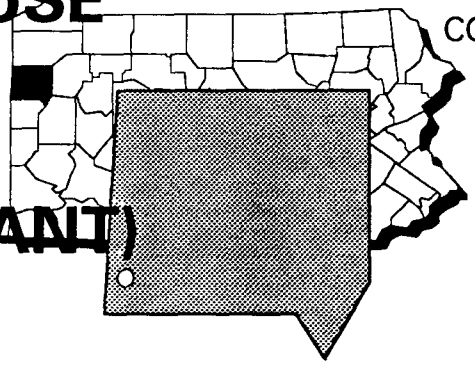
Environmental Progress

The removal of drums and contaminated wastes from the Welsh Landfill site, as well as the provision of temporary drinking water to the homes affected by contaminated groundwater, have reduced the exposure potential while the site awaits final solutions for the cleanup of contaminated groundwater.

WESTINGHOUSE ELECTRIC CORP. (SHARON PLANT)

PENNSYLVANIA

EPA ID# PAD005000575



EPA REGION 3
CONGRESSIONAL DIST. 24
Mercer County
Sharon

Site Description

The 50-acre Westinghouse plant in Sharon produced and repaired transformers from 1922 to 1984. From 1936 to 1976, Westinghouse used polychlorinated biphenyls (PCBs) as a conducting fluid in some of the transformers. PCBs were spilled in certain areas during routine operations. At least 6,000 gallons of solvents and oil leaked from an underground tank in 1984. In 1985, the EPA detected PCBs at two of the four points where the plant discharges wastewater to the Shenango River. The company had a discharge permit under the National Pollutant Discharge Elimination System (NPDES). The Pennsylvania Department of Environmental Resources (PADER) detected PCBs in river sediments between the site and a water intake for the Shenango Valley Water Company, which provides drinking water to approximately 75,000 people. The water intake is 1,600 feet downstream of the plant's discharge points.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/16/88
Final Date: 08/30/90

Threats and Contaminants

The sediments and surface water of the Shenango River are contaminated with PCBs from the former site operations. People who come into direct contact with or accidentally ingest contaminated sediments or surface water may be at risk.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: In 1976, approximately 48,000 gallons of PCBs and 15,000 gallons of organic solvents were removed from the site and were incinerated.

Entire Site: Westinghouse currently is conducting a study to determine the nature and extent of contamination at the site. The study, scheduled to be completed in 1992, will identify the contaminants and will identify alternatives for the final cleanup.

Site Facts: In 1985, the PADER issued Westinghouse an Administrative Order to conduct a study of conditions at the site and to submit a cleanup plan.

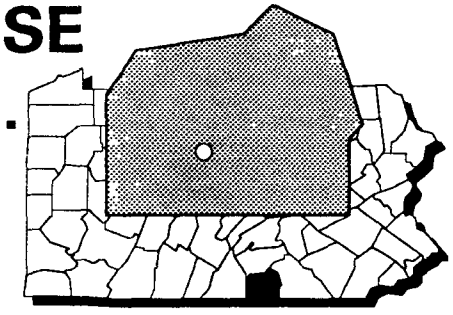
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Westinghouse Electric Corp. (Sharon Plant) site while studies are taking place and cleanup activities are being planned.

WESTINGHOUSE ELEVATOR CO. PLANT

PENNSYLVANIA

EPA ID# PAD043882281



EPA REGION 3

CONGRESSIONAL DIST. 19

Adams County

Cumberland Township

Other Names:
Westinghouse #3

Site Description

The Westinghouse Elevator Co. Plant manufactured elevators on this 85-acre site. The plant has been sold to Shendler Industries. The elevators are processed through a paint and degreasing line that uses chlorinated solvents. Until 1980, the company practice was to put the waste solvents and sludges into drums and dispose of them through a local hauler, with no direction given as to proper disposal procedures. In 1983, in response to concerns presented by the Adams County Community Environmental Control, the Pennsylvania Department of Environmental Resources (PADER) conducted an investigation that identified five contaminated sites in the Gettysburg area, all potentially associated with the Westinghouse plant. Further studies found that private wells around the plant also were contaminated. Plant contamination has been attributed to sloppy operations. The population within 3 miles of the site is approximately 13,500. Adjacent to the site are streams that flow into Rock Creek, which is used for irrigation and swimming.

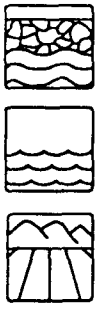
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



The groundwater and surface water are contaminated with trichloroethane and dichloroethylene from the painting and degreasing operations on the site. Trichloroethylene (TCE) has been detected in groundwater at levels exceeding the accepted background level, which could cause a threat of contamination to nearby wells. Volatile organic compounds (VOCs) have been detected in neighboring stream sediments. Soils have been contaminated with metals, polychlorinated biphenyls (PCBs), and VOCs. People who accidentally ingest or come in direct contact with contaminated groundwater, surface water, sediments, or soil could be at risk.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase aimed at cleanup of the entire site.

Response Action Status

Immediate Action: In 1984, Westinghouse began supplying 12 residents in the vicinity of the elevator plant with bottled water. Later that year, the EPA installed a water line that supplied water to residents with contaminated wells. In addition, the lagoon embankment and sludge material, plus some unopened drums, were removed from the site. Subsequently, a fence was installed around the lagoon. In 1987, Westinghouse implemented a series of measures to control erosion, drainage, and sedimentation. These included installing dikes around the lagoon and stressed vegetation and covering the lagoon with mulch. The stressed vegetation area was covered with mulch and plastic sheeting, the southwest corner of the lagoon was regraded, a silt fence was installed around the lagoon next to the stream, a culvert was removed, and the channel in the East stream was reshaped.

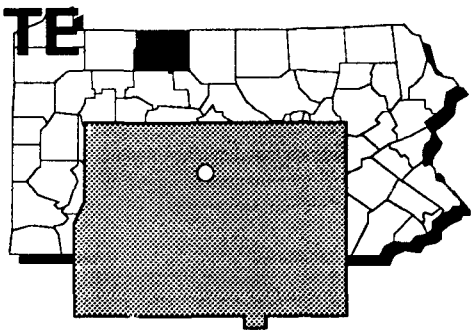
Entire Site: Westinghouse is studying the type and extent of contamination at the plant. The studies are planned to be completed in 1991 and will recommend alternatives for the cleanup. Westinghouse has installed a new tower to treat the groundwater and currently is pumping and treating the groundwater at the plant. Once the studies have been completed, a final remedy selection will be made by the EPA and Westinghouse.

Site Facts: The EPA and Westinghouse signed a Consent Order in 1988, under which Westinghouse is to study the type and extent of contamination at the site and to identify alternatives for cleanup.

Environmental Progress

The provision of a safe drinking water supply to the affected residents near the Westinghouse Elevator Co. Plant and the installation of a fence have reudced the potential for exposure to contamination exposure at the site. Ongoing groundwater treatment continues to reduce contamination while a final remedy for the site contamination is being sought.

WESTLINE SITE
PENNSYLVANIA
EPA ID# PAD980692537



EPA REGION 3
CONGRESSIONAL DIST. 23
McKean County
Westline

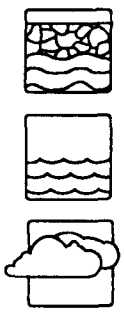
Site Description

This 40-acre site on the northern side of Westline once contained a lumber processing facility that operated for the first half of the century. Its chemical plant converted lumber into charcoal, methanol, and acetic acid, until a fire and explosion caused its closure in 1952. The plant's foundation, demolition debris, and a tar-like production waste containing high levels of polycyclic aromatic hydrocarbons (PAHs) and various phenolic compounds were left behind by the previous facility operators. The waste material was disposed of, or flowed into, natural or excavated depressions located hundreds of feet away within the town. The site consists of most of Westline and its adjacent streams, including Kinzua Creek and Turnip Run. The dispersed waste tar deposits range in area and some are up to 9 feet thick. A 1,500-square-foot, 6-inch thick deposit is located behind the Westline Church; an even larger deposit was removed in 1983. Plant-related contaminants have been detected mainly in surface soils and groundwater. As of 1988, however, domestic wells no longer were being used. Westline's water supply now is a spring, which has not been polluted, located to the north of the town. The surrounding area is rural, and the town is surrounded by the Allegheny National Forest. Westline has a small, permanent resident population of about 100, which increases seasonally. Hunting and fishing camps are located throughout the town.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



The contaminant causing the most concern in the groundwater is benzene. Volatile organic compounds (VOCs) have been detected in one monitoring well. PAHs from tar deposits, rainwater infiltration, migration in surface water, and movement in the air pose a threat to people who come in direct contact with, inhale, or ingest contaminated materials. Water and food chain contamination are said to be negligible, since the town began using the nearby spring as a new water supply. The town is located in a 100-year flood plain; areas containing tar would be subject to erosion if a flood occurred, possibly causing contaminants to enter the Allegheny Reservoir. Low levels of VOCs were found in Kinzua Creek, which discharges into the Allegheny Reservoir.

Cleanup Approach

The site is being addressed in three stages: initial actions and two long-term remedial phases focusing on source control and groundwater monitoring.

Response Action Status

Initial Actions: In 1983, the property owners placed a fence and warning signs around the property. Also in 1983, the EPA conducted two emergency actions at the site. Workers capped the largest tar deposit with clay and then covered and graded the area with clean fill that was seeded and mulched. Cracks soon appeared in the cover, however, and liquids again began leaching from the area. At this point, the EPA excavated and removed 2,000 tons of tar and contaminated soils from the site.

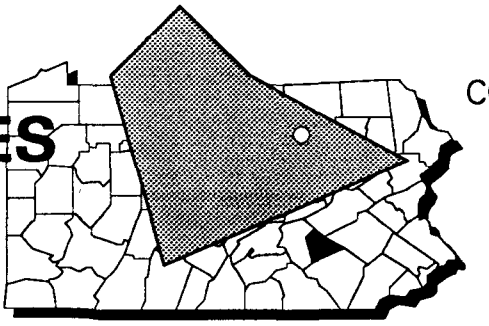
Source Control: The cleanup actions recommended for source control feature: (1) excavating tar from all known deposits and any that were discovered during the work; (2) removing contaminated soils; (3) backfilling and revegetating excavations; (4) transporting contaminated materials to an EPA-licensed facility for incineration; (5) conducting groundwater studies; and (6) checking the flood plain area periodically for tar deposits newly exposed by erosion. Removal of tar deposits was completed in 1990. The activities included further, but not total, removal of the major tar deposit partially excavated in 1983. This area has been cleaned up to levels that do not pose an immediate threat to human health or the environment.

Groundwater Monitoring: The EPA has determined that no further action is required to clean up the groundwater. Since Westline now is getting drinking water from an unpolluted source, and since groundwater is not severely contaminated, the natural processes that gradually clear groundwater pollution will be allowed to take their course. This process is estimated to take from five to ten years. The EPA will continue to monitor groundwater to ensure that natural processes are effective and will prohibit the construction of any new drinking water wells in the vicinity.

Environmental Progress

By constructing a fence to limit access to the site and removing tar and contaminated soil from the areas of greatest pollution, the potential for exposure to hazardous materials at the Westline Site has been reduced. The EPA has completed all planned cleanup activities and will continue to monitor the site to ensure that safety levels are maintained.

WHITMOYER LABORATORIES
PENNSYLVANIA
EPA ID# PAD003005014



EPA REGION 3
CONGRESSIONAL DIST. 16
Lebanon County
1 mile southwest of Myerstown

Other Names:
Whitmoyer Laboratories

Site Description

The Whitmoyer Laboratories (WHI) site occupies 22 acres on Fairlane Avenue. The company manufactured veterinary pharmaceuticals between 1934 and 1984 and produced and stored aniline and soluble arsenic compounds. Arsenic wastes were disposed of in concrete vaults, holding tanks, and unlined lagoons. As much as 4 million pounds of soluble arsenic wastes may have been placed in the lagoons during the 1960s. The site itself features 17 buildings, 23 storage tanks, a concrete storage vault, 2 lagoons, a waste pit, a petroleum products pipeline and pump station, and a railroad spur. All have been abandoned except for one building, which is operated as a food warehouse, and the pipeline and pump station. The laboratory changed ownership from Whitmoyer to Rohm & Haas in 1964, to Smith-Kline Beecham in 1978, and to Stafford Laboratories in 1982. In 1964, Rohm & Haas detected arsenic pollution in the soils, groundwater, and surface water that had been caused by previous waste disposal in the unlined lagoons. A concrete vault was constructed to accept the lagoon sludges and other contaminated materials. About 4,700 people use wells within 3 miles of the site. The closest home is within 200 feet of the site, and 1,300 people live within a 1-mile radius. A grade school stands 1/2 mile away. Tulpehocken Creek, which has been proposed as part of Pennsylvania's scenic river system, flows a few yards from the site. In addition, very small pockets of ecologically significant wetlands exist along the creek.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants

On- and off-site groundwater and surface water contain arsenic and volatile organic compounds (VOCs) from former disposal practices. Soil and on- and off-site sediments are contaminated with arsenic and some organics. Wastes in the concrete vault and lagoon are polluted with arsenic and aniline. Health risks exist from drinking or inhaling contaminated groundwater. This risk, however, has been reduced by supplying bottled water. Potential risks also exist from direct contact, accidental ingestion, or inhalation of on-site soils, surface waters, or sediments, or inhalation of airborne contaminants. Consumption of crops or livestock raised in the adjoining fields also is of concern.

Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on the cleanup of the entire site, concentrated liquids, and of the soil and groundwater.

Response Action Status

Immediate Actions: Rohm & Haas, new owners of the site in 1964, excavated arsenic sludges from unlined lagoons and deposited them in a specially built concrete lagoon on site. The EPA took emergency action in 1987 to provide bottled water to 20 homes with contaminated wells. An EPA emergency action during 1988 and 1989 removed abandoned drums and laboratory chemicals. In addition, this action included connecting residences to the Myerstown municipal water supply, which currently is being carried out by the potentially responsible parties.

Entire Site: A study to determine the contamination of the vault, lagoons, miscellaneous products, and site structures and to identify cleanup remedies was completed in early 1990. A proposed plan was prepared for the cleanup activities for the vault, lagoons, miscellaneous products, and site structures. The remedy selected by the EPA for the site includes cement fixation and incineration of vault wastes, iron fixation for lagoon wastes, demolition and incineration for buildings, and incineration and/or off-site disposal of remaining materials. The design of the cleanup is scheduled to begin in 1991.

Concentrated Liquids: The EPA selected an early-action remedy in 1989, which determined that the bulk liquids stored on site needed to be removed and disposed of quickly. Workers consolidated the waste liquids into three general categories, transported them off site for treatment, and eventually disposed of the treated liquids into an off-site surface water body and disposed of solid residues in an off-site landfill. Organic compounds in the liquids were destroyed via heat or biological treatment or were recycled. Tanks, vessels, and piping were cleaned and removed.

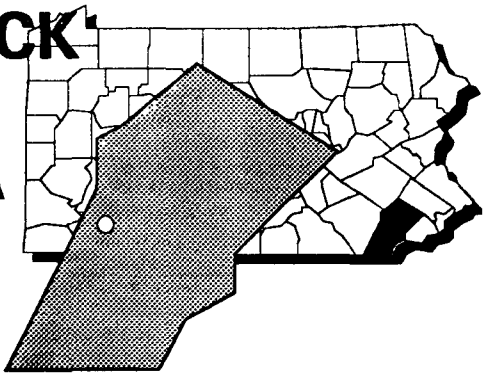
Soils and Groundwater: In 1990, the EPA selected a remedy to cleanup the soil and groundwater at the site. This remedy includes treatment with cement fixation and off-site disposal for heavily contaminated soils, capping of lightly contaminated soils, and pumping and treatment of contaminated groundwater. The design of the cleanup is scheduled to begin in 1992.

Site Facts: In 1985, Whitmoyer Laboratories submitted a revised Hazardous Waste Treatment and Storage Plan to the Pennsylvania Department of Environmental Resources (PADER). Very little of the plan was implemented, and the plant was abandoned in 1987. The PADER returned the lead for the site cleanup to the EPA in 1987.

Environmental Progress

The construction of the concrete vaults for the storage of contaminated sludges, the removal of abandoned drums and laboratory chemicals, and the provision of a safe drinking water source have made the Whitmoyer Laboratories site safer while it awaits the start of the planned remedies for cleanup of the entire site and of the soil and groundwater.

WILLIAM DICK LAGOONS
PENNSYLVANIA
EPA ID# PAD980537773



EPA REGION 3
CONGRESSIONAL DIST. 16
Chester County
West Caln Township

Site Description

From the late 1950s to 1970, three unlined lagoons on the 4 1/2-acre William Dick Lagoons site in West Caln Township were used for waste disposal. Chemical Leaman Tank Lines, Inc. cleaned petroleum products, latexes, and resins from its tank trailers and dumped the final rinsewater (and possibly residual chemical product) into the lagoons. The lagoons, about 2 acres in total area, contained more than 4 million gallons of wastewater. Site soils are contaminated and are moderately permeable, resulting in the contamination of groundwater. The lagoons were not adequately diked, and two were breached in 1970, releasing about 300,000 gallons into the nearby area and a small tributary. In 1971, some degree of cleanup was conducted by Chemical Leaman, under an agreement with the Pennsylvania Department of Health. Chemical Leaman collected solids from the materials in the lagoons, sprayed the liquid that remained over the land, and filled the remaining lagoon pits with soil and vegetation. In 1987, the EPA sampled private wells and springs used by local residents and found several to be contaminated with trichloroethylene (TCE). Chemical Leaman agreed to provide alternate water supplies to affected homes and to perform other cleanup activities. The Chickies Formation, within 3 miles of the site, is the sole source of water for private wells serving 1,400 people. Numerous residential wells surround the site, the nearest lying 400 feet to the north. A water supply intake at Birch Run, approximately 3 miles downstream of the site, is used as an emergency source of water for the approximately 13,600 residents of the city of Coatsville. Two trailer parks are 1/2 and 3/4 mile away from the site.

Site Responsibility: The site is being cleaned up through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 07/01/87

Threats and Contaminants

The groundwater is contaminated with TCE, chloroform, and other volatile organic compounds (VOCs) and semi-volatile organic compounds from former waste disposal activities. The soil is contaminated with a variety of VOCs and semi-VOCs, as well as polycyclic aromatic hydrocarbons (PAHs) and pesticides. Drinking contaminated groundwater, inhaling volatile emissions from local wells, and coming into direct contact with contaminated soil poses a health risk to residents.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase concentrating on cleanup of the soils and groundwater.

Response Action Status

Immediate Actions: When local springs and wells were found to be contaminated with TCE in 1987, Chemical Leaman agreed to provide treatment of private well water for homes with contaminant levels above health-based criteria. More recently, the company agreed to provide bottles water to residences with any level of TCE in their private well water. The company continues to sample and analyze local residential wells, and is providing treatment units and bottled water when needed. The company also has installed a fence around the site. To date, 12 homes have been provided with full house carbon treatment units.

Soil and Groundwater: Chemical Leaman, under EPA monitoring, conducted an intensive study of soil and groundwater contamination at the site to assess its nature and extent and to recommend strategies for cleanup. The investigation was completed and options for cleaning up the site were submitted in early 1990. After the parties potentially responsible for the site contamination conducted additional investigative work on cleanup alternatives for groundwater and site soils, cleanup methods were proposed early in 1991. Specifically, a water line will be extended to service residences affected or potentially affected by the site and an interim action to clean up groundwater will be implemented. The groundwater action will include further study to adequately define site hydrogeologic conditions; installation of groundwater extraction wells; construction of a groundwater treatment plant; discharge of treated groundwater into a nearby stream; and installation and sampling of groundwater monitoring wells. Upon completion of these measures, the EPA will assess groundwater contamination and decide if further work is necessary. A decision on cleanup of contaminated soils will be made based on the results of a vacuum extraction treatability study as well as consideration of further alternatives. Soil cleanup criteria will be determined via modeling. The cleanup is expected to be undertaken in three separate phases.

Site Facts: In late 1987, the EPA and Chemical Leaman entered into a Consent Agreement whereby the company would take initial actions to secure the site and provide safe drinking water to affected residents. In 1988, the EPA entered into a second Consent Agreement with Chemical Leaman for the performance of a study to determine the nature and extent of site contamination.

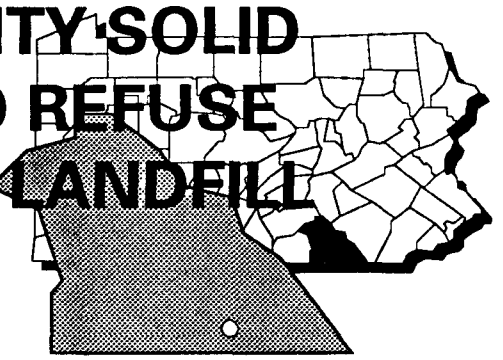
Environmental Progress

Provision of a safe drinking water source and the installation of a fence to restrict access to the site have reduced the risk of exposure to contaminated materials at the William Dick Lagoons site while selection of the cleanup remedy is underway.

YORK COUNTY SOLID WASTE AND REFUSE AUTHORITY LANDFILL

PENNSYLVANIA

EPA ID# PAD980830715



EPA REGION 3

CONGRESSIONAL DIST. 19

York County

Hopewell Township

Other Names:
York County Refuse Authority

Site Description

The York County Solid Waste and Refuse Authority Landfill has been in operation since 1974. About 135 of the site's 300 acres are used for municipal and industrial waste disposal in an unlined landfill. The operation receives an average of 400 tons of waste each day. The site is fenced, but public access is not restricted. Off-site groundwater contamination with several organic chemicals has been documented since 1983. The County has installed pumping wells and water treatment operations to control runoff and groundwater migration. Approximately 330 people live within a 1-mile radius of the site. The closest residence is less than 1,000 feet from the site. Approximately 2,200 people living within 3 miles of the site continue to receive their drinking water from groundwater being monitored by the County's Solid Waste Refuse Authority.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 04/01/85
Final Date: 07/01/87

Threats and Contaminants

The groundwater is contaminated with various volatile organic compounds (VOCs) from past disposal practices. The potential health threats to area residents include drinking or coming in contact with contaminated groundwater.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1984, the State ordered the York County Solid Waste and Refuse Authority to continue groundwater monitoring, provide bottled water to affected residents, and develop plans for groundwater cleanup. The owner provided bottled water to 25 homes in the immediate vicinity of the site. In 1985, the State requested the installation of additional groundwater monitoring wells and the completion and operation of a groundwater extraction and treatment system via air stripping and lining the active portion of the landfill. The groundwater treatment system currently is active and its effectiveness is being evaluated. In 1986, York County purchased the Eppley Trailer Park, which contained 21 homes, and condemned it to eliminate future residential use.

Entire Site: Under EPA supervision, the parties potentially responsible for the site contamination are performing an intensive study of site conditions, which explores the extent and nature of contamination and will result in recommendations for groundwater cleanup strategies. The parties also will examine methods for monitoring the aquifer to detect any movement of the contaminants. The investigation is scheduled for completion in late 1991.

Site Facts: In May 1984, the State entered into a Consent Agreement with the Solid Waste and Refuse Authority to continue groundwater monitoring, provide bottled water to affected residents, and develop plans for cleaning groundwater. In November 1987, the State and the potentially responsible parties negotiated a Consent Order for conducting a study at the site.

Environmental Progress

Monitoring groundwater and providing bottled water to affected residents, as well as closing down the trailer park area, have reduced the potential for exposure to contaminants in the areas surrounding the York County Solid Waste Landfill while further investigations leading to the final cleanup activities are taking place.

Glossary: Terms Used in the Fact Sheets

Terms Used in the NPL Book

This glossary defines terms used throughout the NPL Volumes. The terms and abbreviations contained in this glossary apply specifically to work performed under the Superfund program in the context of hazardous waste management. These terms may have other meanings when used in a different context.

Acids: Substances, characterized by low pH (less than 7.0), that are used in chemical manufacturing. Acids in high concentration can be very corrosive and react with many inorganic and organic substances. These reactions possibly may create toxic compounds or release heavy metal contaminants that remain in the environment long after the acid is neutralized.

Administrative Order On Consent: A legal and enforceable agreement between the EPA and the parties potentially responsible for site contamination. Under the terms of the Order, the potentially responsible parties (PRPs) agree to perform or pay for site studies or cleanups. It also describes the oversight rules, responsibilities, and enforcement options that the government may exercise in the event of non-compliance by potentially responsible parties. This Order is signed by PRPs and the government; it does not require approval by a judge.

Administrative Order [Unilateral]: A legally binding document issued by the EPA, directing the parties potentially responsible to perform site cleanups or studies (generally, the EPA does not issue Unilateral Orders for site studies).

Aeration: A process that promotes breakdown of contaminants in soil or water by exposing them to air.

Agency for Toxic Substances and Disease Registry (ATSDR): The Federal agency within the U.S. Public Health Service charged with carrying out the health-related responsibilities of CERCLA.

Air Stripping: A process whereby volatile organic chemicals (VOCs) are removed from contaminated material by forcing a stream of air through it in a pressurized vessel. The contaminants are evaporated into the air stream. The air may be further treated before it is released into the atmosphere.

Ambient Air: Any unconfined part of the atmosphere. Refers to the air that may be inhaled by workers or residents in the vicinity of contaminated air sources.

Aquifer: An underground layer of rock, sand, or gravel capable of storing water within cracks and pore spaces, or between grains. When water contained within an aquifer is of sufficient quantity and quality, it can be tapped and used for drinking or other purposes. The water contained in the aquifer is called groundwater. A sole source aquifer supplies 50% or more of the drinking water of an area.

Artesian (Well): A well made by drilling into the earth until water is reached, which, from internal pressure, flows up like a fountain.

GLOSSARY

Attenuation: The naturally occurring process by which a compound is reduced in concentration over time through adsorption, degradation, dilution, and/or transformation.

Background Level: The amount of a substance typically found in the air, water, or soil from natural, as opposed to human, sources.

Baghouse Dust: Dust accumulated in removing particulates from the air by passing it through cloth bags in an enclosure.

Bases: Substances characterized by high pH (greater than 7.0), which tend to be corrosive in chemical reactions. When bases are mixed with acids, they neutralize each other, forming salts.

Berm: A ledge, wall, or a mound of earth used to prevent the migration of contaminants.

Bioaccumulate: The process by which some contaminants or toxic chemicals gradually collect and increase in concentration in living tissue, such as in plants, fish, or people, as they breathe contaminated air, drink contaminated water, or eat contaminated food.

Biological Treatment: The use of bacteria or other microbial organisms to break down toxic organic materials into carbon dioxide and water.

Bioremediation: A cleanup process using naturally occurring or specially cultivated microorganisms to digest contaminants and break them down into non-hazardous components.

Bog: A type of wetland that is covered with peat moss deposits. Bogs depend primarily on moisture from the air for their water source, are usually acidic, and are rich in plant residue [see Wetland].

Boom: A floating device used to contain oil floating on a body of water or to restrict the potential overflow of waste liquids from containment structures.

Borehole: A hole that is drilled into the ground and used to sample soil or groundwater.

Borrow Pit: An excavated area where soil, sand, or gravel has been dug up for use elsewhere.

Cap: A layer of material, such as clay or a synthetic material, used to prevent rainwater from penetrating and spreading contaminated materials. The surface of the cap generally is mounded or sloped so water will drain off.

Carbon Adsorption: A treatment system in which contaminants are removed from groundwater and surface water by forcing water through tanks containing activated carbon, a specially treated material that attracts and holds or retains contaminants.

Carbon Disulfide: A degreasing agent formerly used extensively for parts washing. This compound has both inorganic and organic properties, which increase cleaning efficiency. However, these properties also cause chemical reactions that increase the hazard to human health and the environment.

Carbon Treatment: [see Carbon Adsorption].

Cell: In solid waste disposal, one of a series of holes in a landfill where waste is dumped, compacted, and covered with layers of dirt.

CERCLA: [see Comprehensive Environmental Response, Compensation, and Liability Act].

Characterization: The sampling, monitoring, and analysis of a site to determine the

extent and nature of toxic releases. Characterization provides the basis for acquiring the necessary technical information to develop, screen, analyze, and select appropriate cleanup techniques.

Chemical Fixation: The use of chemicals to bind contaminants, thereby reducing the potential for leaching or other movement.

Chromated Copper Arsenate: An insecticide/herbicide formed from salts of three toxic metals: copper, chromium, and arsenic. This salt is used extensively as a wood preservative in pressure-treating operations. It is highly toxic and water-soluble, making it a relatively mobile contaminant in the environment.

Cleanup: Actions taken to eliminate a release or threat of release of a hazardous substance. The term "cleanup" sometimes is used interchangeably with the terms remedial action, removal action, response action, or corrective action.

Closure: The process by which a landfill stops accepting wastes and is shut down, under Federal guidelines that ensure the protection of the public and the environment.

Comment Period: A specific interval during which the public can review and comment on various documents and EPA actions related to site cleanup. For example, a comment period is provided when the EPA proposes to add sites to the NPL. There is minimum 3-week comment period for community members to review and comment on the remedy proposed to clean up a site.

Community Relations: The EPA effort to establish and maintain two-way communication with the public. Goals of community relations programs include creating an understanding of EPA programs and related actions, assuring public input into decision-making processes related to affected communities, and making certain that the Agency is aware of, and responsive to, public concerns. Specific community relations activities are required in relation to Superfund cleanup actions [see Comment Period].

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): Congress enacted the CERCLA, known as Superfund, in 1980 to respond directly to hazardous waste problems that may pose a threat to the public health and the environment. The EPA administers the Superfund program.

Confluence: The place where two bodies of water, such as streams or rivers, come together.

Consent Decree: A legal document, approved and issued by a judge, formalizing an agreement between the EPA and the parties potentially responsible for site contamination. The decree describes cleanup actions that the potentially responsible parties are required to perform and/or the costs incurred by the government that the parties will reimburse, as well as the roles, responsibilities, and enforcement options that the government may exercise in the event of non-compliance by potentially responsible parties. If a settlement between the EPA and a potentially responsible party includes cleanup actions, it must be in the form of a Consent Decree. A Consent Decree is subject to a public comment period.

Consent Order: [see Administrative Order on Consent].

Containment: The process of enclosing or containing hazardous substances in a structure, typically in a pond or a lagoon, to prevent the migration of contaminants into the environment.

Contaminant: Any physical, chemical, biological, or radiological material or substance whose quantity, location, or nature produces undesirable health or environmental effects.

Contingency Plan: A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or other accident that releases toxic chemicals, hazardous wastes, or radioactive materials into the environment.

Cooperative Agreement: A contract between the EPA and the States, wherein a State agrees to manage or monitor certain site cleanup responsibilities and other activities on a cost-sharing basis.

Cost Recovery: A legal process by which potentially responsible parties can be required to pay back the Superfund program for money it spends on any cleanup actions [see Potentially Responsible Parties].

Cover: Vegetation or other material placed over a landfill or other waste material. It can be designed to reduce movement of water into the waste and to prevent erosion that could cause the movement of contaminants.

Creosotes: Chemicals used in wood preserving operations and produced by distillation of tar, including polycyclic aromatic hydrocarbons and polynuclear aromatic hydrocarbons [see PAHs and PNAs]. Contaminating sediments, soils, and surface water, creosotes may cause skin ulcerations and cancer through prolonged exposure.

Culvert: A pipe used for drainage under a road, railroad track, path, or through an embankment.

Decommission: To revoke a license to operate and take out of service.

Degradation: The process by which a chemical is reduced to a less complex form.

Degrease: To remove grease from wastes, soils, or chemicals, usually using solvents.

De minimis: This legal phrase pertains to settlements with parties who contributed small amounts of hazardous waste to a site. This process allows the EPA to settle with small, or *de minimis* contributors, as a single group rather than as individuals, saving time, money, and effort.

Dewater: To remove water from wastes, soils, or chemicals.

Dike: A low wall that can act as a barrier to prevent a spill from spreading.

Disposal: Final placement or destruction of toxic, radioactive, or other wastes; surplus or banned pesticides or other chemicals; polluted soils; and drums containing hazardous materials. Disposal may be accomplished through the use of approved secure landfills, surface impoundments, land farming, deep well injection, or incineration.

Downgradient: A downward hydrologic slope that causes groundwater to move toward lower elevations. Therefore, wells *downgradient* of a contaminated groundwater source are prone to receiving pollutants.

Effluent: Wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

Emission: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities.

Emulsifiers: Substances that help in mixing materials that do not normally mix; e.g., oil and water.

Endangerment Assessment: A study conducted to determine the risks posed to public health or the environment by contamination at NPL sites. The EPA or the State conducts the study when a legal action is to be taken to direct the potentially responsible parties to clean up a site or pay for the cleanup. An endangerment assessment supplements an investigation of the site hazards.

Enforcement: EPA, State, or local legal actions taken against parties to facilitate settlements; to compel compliance with laws, rules, regulations, or agreements; and/or to obtain penalties or criminal sanctions for violations. Enforcement procedures may vary, depending on the specific requirements of different environmental laws and related regulatory requirements. Under CERCLA, for example, the EPA will seek to require potentially responsible parties to clean up a Superfund site or pay for the cleanup [see Cost Recovery].

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or surface runoff, but can be intensified by such land-related practices as farming, residential or industrial development, road building, or timber-cutting. Erosion may spread surface contamination to off-site locations.

Estuary (estuarine): Areas where fresh water from rivers and salt water from nearshore ocean waters are mixed. These areas may include bays, mouths of rivers, salt marshes, and lagoons. These water ecosystems shelter and feed marine life, birds, and wildlife.

Evaporation Ponds: Areas where sewage sludge or other watery wastes are dumped and allowed to dry out.

Feasibility Study: The analysis of the potential cleanup alternatives for a site. The feasibility study usually starts as soon as the remedial investigation is underway; together, they are commonly referred to as the RI/FS [see Remedial Investigation].

Filtration: A treatment process for removing solid (particulate) matter from water by passing the water through sand, activated carbon, or a man-made filter. The process is often used to remove particles that contain contaminants.

Flood Plain: An area along a river, formed from sediment deposited by floods. Flood plains periodically are innundated by natural floods, which can spread contamination.

Flue Gas: The air that is emitted from a chimney after combustion in the burner occurs. The gas can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles, and many chemical pollutants.

Fly Ash: Non-combustible residue that results from the combustion of flue gases. It can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, as well as many other chemical pollutants.

French Drain System: A crushed rock drain system constructed of perforated pipes, which is used to drain and disperse wastewater.

Gasification (coal): The conversion of soft coal into gas for use as a fuel.

Generator: A facility that emits pollutants into the air or releases hazardous wastes into water or soil.

Good Faith Offer: A voluntary offer, generally in response to a Special Notice letter, made by a potentially responsible party, consisting of a written proposal demonstrating a potentially responsible party's qualifications

and willingness to perform a site study or cleanup.

Groundwater: Underground water that fills pores in soils or openings in rocks to the point of saturation. In aquifers, groundwater occurs in sufficient quantities for use as drinking and irrigation water and other purposes.

Groundwater Quality Assessment: The process of analyzing the chemical characteristics of groundwater to determine whether any hazardous materials exist.

Halogens: Reactive non-metals, such as chlorine and bromine. Halogens are very good oxidizing agents and, therefore, have many industrial uses. They are rarely found by themselves; however, many chemicals such as polychlorinated biphenyls (PCBs), some volatile organic compounds (VOCs), and dioxin are reactive because of the presence of halogens.

Hazard Ranking System (HRS): The principal screening tool used by the EPA to evaluate relative risks to public health and the environment associated with abandoned or uncontrolled hazardous waste sites. The HRS calculates a score based on the potential of hazardous substances spreading from the site through the air, surface water, or groundwater and on other factors such as nearby population. The HRS score is the primary factor in deciding if the site should be on the NPL.

Hazardous Waste: By-products of society that can pose a substantial present or potential hazard to human health and the environment when improperly managed. It possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Hot Spot: An area or vicinity of a site containing exceptionally high levels of contamination.

Hydrogeology: The geology of groundwater, with particular emphasis on the chemistry and movement of water.

Impoundment: A body of water or sludge confined by a dam, dike, floodgate, or other barrier.

Incineration: A group of treatment technologies involving destruction of waste by controlled burning at high temperatures, e.g., burning sludge to reduce the remaining residues to a non-burnable ash that can be disposed of safely on land, in some waters, or in underground locations.

Infiltration: The movement of water or other liquid down through soil from precipitation (rain or snow) or from application of wastewater to the land surface.

Influent: Water, wastewater, or other liquid flowing into a reservoir, basin, or treatment plant.

Injection Well: A well into which waste fluids are placed, under pressure, for purposes of disposal.

Inorganic Chemicals: Chemical substances of mineral origin, not of basic carbon structure.

Installation Restoration Program: The specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its hazardous waste sites and controlling the migration of hazardous contaminants from those sites.

Intake: The source from where a water supply is drawn, such as from a river or water body.

Interagency Agreement: A written agreement between the EPA and a Federal agency that has the lead for site cleanup activities,

setting forth the roles and responsibilities of the agencies for performing and overseeing the activities. States often are parties to interagency agreements.

Interim (Permit) Status: Conditions under which hazardous waste treatment, storage, and disposal facilities, that were operating when regulations under the RCRA became final in 1980, are temporarily allowed by the EPA to continue to operate while awaiting denial or issuance of a permanent permit. The facility must comply with certain regulations to maintain interim status.

Lagoon: A shallow pond or liquid waste containment structure. Lagoons typically are used for the storage of wastewaters, sludges, liquid wastes, or spent nuclear fuel.

Landfarm: To apply waste to land and/or incorporate waste into the surface soil, such as fertilizer or soil conditioner. This practice commonly is used for disposal of composted wastes and sludges.

Landfill: A disposal facility where waste is placed in or on land. *Sanitary* landfills are disposal sites for non-hazardous solid wastes. The waste is spread in layers, compacted to the smallest practical volume, and covered with soil at the end of each operating day. Secure *chemical* landfills are disposal sites for hazardous waste. They are designed to minimize the chance of release of hazardous substances into the environment [see Resource Conservation and Recovery Act].

Leachate [n]: The liquid that trickles through or drains from waste, carrying soluble components from the waste. **Leach, Leaching [v.t.]:** The process by which soluble chemical components are dissolved and carried through soil by water or some other percolating liquid.

Leachate Collection System: A system that gathers liquid that has leaked into a landfill or other waste disposal area and pumps it to the surface for treatment.

Liner: A relatively impermeable barrier designed to prevent leachate (waste residue) from leaking from a landfill. Liner materials include plastic and dense clay.

Long-term Remedial Phase: Distinct, often incremental, steps that are taken to solve site pollution problems. Depending on the complexity, site cleanup activities can be separated into several of these phases.

Marsh: A type of wetland that does not contain peat moss deposits and is dominated by vegetation. Marshes may be either fresh or saltwater and tidal or non-tidal [see Wetland].

Migration: The movement of oil, gas, contaminants, water, or other liquids through porous and permeable soils or rock.

Mill Tailings: [See Mine Tailings].

Mine Tailings: A fine, sandy residue left from mining operations. Tailings often contain high concentrations of lead, uranium, and arsenic or other heavy metals.

Mitigation: Actions taken to improve site conditions by limiting, reducing, or controlling toxicity and contamination sources.

Modeling: A technique using a mathematical or physical representation of a system or theory that tests the effects that changes on system components have on the overall performance of the system.

Monitoring Wells: Special wells drilled at specific locations within, or surrounding, a hazardous waste site where groundwater can be sampled at selected depths and studied to obtain such information as the direction in

which groundwater flows and the types and amounts of contaminants present.

National Priorities List (NPL): The EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund. The EPA is required to update the NPL at least once a year.

Neutrals: Organic compounds that have a relatively neutral pH, complex structure and, due to their organic bases, are easily absorbed into the environment. Naphthalene, pyrene, and trichlorobenzene are examples of neutrals.

Nitroaromatics: Common components of explosive materials, which will explode if activated by very high temperatures or pressures; 2,4,6-Trinitrotoluene (TNT) is a nitroaromatic.

Notice Letter: A General Notice Letter notifies the parties potentially responsible for site contamination of their possible liability. A Special Notice Letter begins a 60-day formal period of negotiation during which the EPA is not allowed to start work at a site or initiate enforcement actions against potentially responsible parties, although the EPA may undertake certain investigatory and planning activities. The 60-day period may be extended if the EPA receives a good faith offer within that period.

On-Scene Coordinator (OSC): The predesignated EPA, Coast Guard, or Department of Defense official who coordinates and directs Superfund removal actions or Clean Water Act oil- or hazardous-spill corrective actions.

Operation and Maintenance: Activities conducted at a site after a cleanup action is completed to ensure that the cleanup or containment system is functioning properly.

Organic Chemicals/Compounds: Chemical substances containing mainly carbon, hydrogen, and oxygen.

Outfall: The place where wastewater is discharged into receiving waters.

Overpacking: Process used for isolating large volumes of waste by jacketing or encapsulating waste to prevent further spread or leakage of contaminating materials. Leaking drums may be contained within oversized barrels as an interim measure prior to removal and final disposal.

Pentachlorophenol (PCP): A synthetic, modified petrochemical that is used as a wood preservative because of its toxicity to termites and fungi. It is a common component of creosotes and can cause cancer.

Perched (groundwater): Groundwater separated from another underlying body of groundwater by a confining layer, often clay or rock.

Percolation: The downward flow or filtering of water or other liquids through subsurface rock or soil layers, usually continuing downward to groundwater.

Petrochemicals: Chemical substances produced from petroleum in refinery operations and as fuel oil residues. These include fluoranthene, chrysene, mineral spirits, and refined oils. Petrochemicals are the bases from which volatile organic compounds (VOCs), plastics, and many pesticides are made. These chemical substances often are toxic to humans and the environment.

Phenols: Organic compounds that are used in plastics manufacturing and are by-products of petroleum refining, tanning, textile, dye, and resin manufacturing. Phenols are highly poisonous.

Physical Chemical Separation: The treatment process of adding a chemical to a substance to separate the compounds for further treatment or disposal.

Pilot Testing: A small-scale test of a proposed treatment system in the field to determine its ability to clean up specific contaminants.

Plugging: The process of stopping the flow of water, oil, or gas into or out of the ground through a borehole or well penetrating the ground.

Plume: A body of contaminated groundwater flowing from a specific source. The movement of the groundwater is influenced by such factors as local groundwater flow patterns, the character of the aquifer in which groundwater is contained, and the density of contaminants [see Migration].

Pollution: Generally, the presence of matter or energy whose nature, location, or quantity produces undesired health or environmental effects.

Polycyclic Aromatic Hydrocarbons or Polyaromatic Hydrocarbons (PAHs): PAHs, such as pyrene, are a group of highly reactive organic compounds found in motor oil. They are a common component of creosotes and can cause cancer.

Polychlorinated Biphenyls (PCBs): A group of toxic chemicals used for a variety of purposes including electrical applications, carbonless copy paper, adhesives, hydraulic fluids, microscope immersion oils, and caulking compounds. PCBs also are produced in certain combustion processes. PCBs are extremely persistent in the environment because they are very stable, non-reactive, and highly heat resistant. Chronic exposure to PCBs is believed to cause liver damage. It also is known to bioaccumulate in fatty tissues. PCB use and sale was banned in 1979 with the passage of the Toxic Substances Control Act.

Polynuclear Aromatic Hydrocarbons (PNAs): PNAs, such as naphthalene, and biphenyls, are a group of highly reactive organic compounds that are a common component of creosotes, which can be carcinogenic.

Polyvinyl Chloride (PVC): A plastic made from the gaseous substance vinyl chloride. PVC is used to make pipes, records, raincoats, and floor tiles. Health risks from high concentrations of vinyl chloride include liver cancer and lung cancer, as well as cancer of the lymphatic and nervous systems.

Potable Water: Water that is safe for drinking and cooking.

Potentially Responsible Parties (PRPs): Parties, including owners, who may have contributed to the contamination at a Superfund site and may be liable for costs of response actions. Parties are considered PRPs until they admit liability or a court makes a determination of liability. PRPs may sign a Consent Decree or Administrative Order on Consent to participate in site cleanup activity without admitting liability.

Precipitation: The removal of solids from liquid waste so that the solid and liquid portions can be disposed of safely; the removal of particles from airborne emissions. Electrochemical precipitation is the use of an anode or cathode to remove the hazardous chemicals. Chemical precipitation involves the addition of some substance to cause the solid portion to separate.

Preliminary Assessment: The process of collecting and reviewing available information about a known or suspected waste site or release to determine if a threat or potential threat exists.

Pump and Treat: A groundwater cleanup technique involving the extracting of contaminated groundwater from the subsurface and the removal of contaminants, using one of several treatment technologies.

Radionuclides: Elements, including radium and uranium-235 and -238, which break down and produce radioactive substances due to their unstable atomic structure. Some are man-made, and others are naturally occurring in the environment. Radon, the gaseous form of radium, decays to form alpha particle radiation, which cannot be absorbed through skin. However, it can be inhaled, which allows alpha particles to affect unprotected tissues directly and thus cause cancer. Radiation also occurs naturally through the breakdown of granite stones.

RCRA: [See Resource Conservation and Recovery Act].

Recharge Area: A land area where rainwater saturates the ground and soaks through the earth to reach an aquifer.

Record of Decision (ROD): A public document that explains which cleanup alternative(s) will be used to clean up sites listed on the NPL. It is based on information generated during the remedial investigation and feasibility study and consideration of public comments and community concerns.

Recovery Wells: Wells used to withdraw contaminants or contaminated groundwater.

Recycle: The process of minimizing waste generation by recovering usable products that might otherwise become waste.

Remedial Action (RA): The actual construction or implementation phase of a Superfund site cleanup following the remedial design [see Cleanup].

Remedial Design: A phase of site cleanup, where engineers design the technical specifications for cleanup remedies and technologies.

Remedial Investigation: An in-depth study designed to gather the data necessary to determine the nature and extent of contamination at a Superfund site, establish the criteria for cleaning up the site, identify the preliminary alternatives for cleanup actions, and support the technical and cost analyses of the alternatives. The remedial investigation is usually done with the feasibility study. Together they are customarily referred to as the RI/FS [see Feasibility Study].

Remedial Project Manager (RPM): The EPA or State official responsible for overseeing cleanup actions at a site.

Remedy Selection: The selection of the final cleanup strategy for the site. At the few sites where the EPA has determined that initial response actions have eliminated site contamination, or that any remaining contamination will be naturally dispersed without further cleanup activities, a "No Action" remedy is selected [see Record of Decision].

Removal Action: Short-term immediate actions taken to address releases of hazardous substances [see Cleanup].

Residual: The amount of a pollutant remaining in the environment after a natural or technological process has taken place, e.g., the sludge remaining after initial wastewater treatment, or particulates remaining in air after the air passes through a scrubbing, or other, process.

Resource Conservation and Recovery Act (RCRA): A Federal law that established a regulatory system to track hazardous substances from the time of generation to disposal. The law requires safe and secure

procedures to be used in treating, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

Retention Pond: A small body of liquid used for disposing of wastes and containing overflow from production facilities. Sometimes retention ponds are used to expand the capacity of such structures as lagoons to store waste.

Riparian Habitat: Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Runoff: The discharge of water over land into surface water. It can carry pollutants from the air and land and spread contamination from its source.

Scrubber: An air pollution device that uses a spray of water or reactant or a dry process to trap pollutants in emissions.

Sediment: The layer of soil, sand, and minerals at the bottom of surface waters, such as streams, lakes, and rivers, that absorbs contaminants.

Seeps: Specific points where releases of liquid (usually leachate) form from waste disposal areas, particularly along the lower edges of landfills.

Seepage Pits: A hole, shaft, or cavity in the ground used for storage of liquids, usually in the form of leachate, from waste disposal areas. The liquid gradually leaves the pit by moving through the surrounding soil.

Septage: Residue remaining in a septic tank after the treatment process.

Sinkhole: A hollow depression in the land surface in which drainage collects; associated with underground caves and passages that facilitate the movement of liquids.

Site Characterization: The technical process used to evaluate the nature and extent of environmental contamination, which is necessary for choosing and designing cleanup measures and monitoring their effectiveness.

Site Inspection: The collection of information from a hazardous waste site to determine the extent and severity of hazards posed by the site. It follows, and is more extensive than, a preliminary assessment. The purpose is to gather information necessary to score the site, using the Hazard Ranking System, and to determine if the site presents an immediate threat that requires a prompt removal action.

Slag: The fused refuse or dross separated from a metal in the process of smelting.

Sludge: Semi-solid residues from industrial or water treatment processes that may be contaminated with hazardous materials.

Slurry Wall: Barriers used to contain the flow of contaminated groundwater or subsurface liquids. Slurry walls are constructed by digging a trench around a contaminated area and filling the trench with an impermeable material that prevents water from passing through it. The groundwater or contaminated liquids trapped within the area surrounded by the slurry wall can be extracted and treated.

Smelter: A facility that melts or fuses ore, often with an accompanying chemical change, to separate the metal. Emissions from smelters are known to cause pollution.

Soil Gas: Gaseous elements and compounds that occur in the small spaces between particles of soil. Such gases can move through

or leave the soil or rock, depending on changes in pressure.

Soil Vapor Extraction: A treatment process that uses vacuum wells to remove hazardous gases from soil.

Soil Washing: A water-based process for mechanically scrubbing soils in-place to remove undesirable materials. There are two approaches: dissolving or suspending them in the wash solution for later treatment by conventional methods, and concentrating them into a smaller volume of soil through simple particle size separation techniques [see Solvent Extraction].

Stabilization: The process of changing an active substance into inert, harmless material, or physical activities at a site that act to limit the further spread of contamination without actual reduction of toxicity.

Solidification/Stabilization: A chemical or physical reduction of the mobility of hazardous constituents. Mobility is reduced through the binding of hazardous constituents into a solid mass with low permeability and resistance to leaching.

Solvent: A substance capable of dissolving another substance to form a solution. The primary uses of industrial solvents are as cleaners for degreasing, in paints, and in pharmaceuticals. Many solvents are flammable and toxic to varying degrees.

Solvent Extraction: A means of separating hazardous contaminants from soils, sludges, and sediment, thereby reducing the volume of the hazardous waste that must be treated. It generally is used as one in a series of unit operations. An organic chemical is used to dissolve contaminants as opposed to water-based compounds, which usually are used in soil washing.

Sorption: The action of soaking up or attracting substances. It is used in many pollution control systems.

Stillbottom: Residues left over from the process of recovering spent solvents.

Stripping: A process used to remove volatile contaminants from a substance [see Air Stripping].

Sumps: A pit or tank that catches liquid runoff for drainage or disposal.

Superfund: The program operated under the legislative authority of the CERCLA and Superfund Amendments and Reauthorization Act (SARA) to update and improve environmental laws. The program has the authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health, welfare, or the environment. The "Superfund" is a trust fund that finances cleanup actions at hazardous waste sites.

Surge Tanks: A holding structure used to absorb irregularities in flow of liquids, including liquid waste materials.

Swamp: A type of wetland that is dominated by woody vegetation and does not accumulate peat moss deposits. Swamps may be fresh or saltwater and tidal or non-tidal [see Wetlands].

Thermal Treatment: The use of heat to remove or destroy contaminants from soil.

Treatability Studies: Testing a treatment method on contaminated groundwater, soil, etc., to determine whether and how well the method will work.

Trichloroethylene (TCE): A stable, colorless liquid with a low boiling point. TCE has many industrial applications, including use as

a solvent and as a metal degreasing agent. TCE may be toxic to people when inhaled, ingested, or through skin contact and can damage vital organs, especially the liver [see Volatile Organic Compounds].

Unilateral [Administrative] Order: [see Administrative Order].

Upgradient: An upward hydrologic slope; demarks areas that are higher than contaminated areas and, therefore, are not prone to contamination by the movement of polluted groundwater.

Vacuum Extraction: A technology used to remove volatile organic compounds (VOCs) from soils. Vacuum pumps are connected to a series of wells drilled to just above the water table. The wells are sealed tightly at the soil surface, and the vacuum established in the soil draws VOC-contaminated air from the soil pores into the well, as fresh air is drawn down from the surface of the soil.

Vegetated Soil Cap: A cap constructed with graded soils and seed for vegetative growth, to prevent erosion [see Cap].

Vitrification: The process of electrically melting wastes and soils or sludges to bind the waste in a glassy, solid material more durable than granite or marble and resistant to leaching.

Volatile Organic Compounds (VOCs): VOCs are manufactured as secondary petrochemicals. They include light alcohols, acetone, trichloroethylene, perchloroethylene, dichloroethylene, benzene, vinyl chloride, toluene, and methylene chloride. These potentially toxic chemicals are used as solvents, degreasers, paints, thinners, and fuels. Because of their volatile nature, they readily evaporate into the air, increasing the potential exposure to humans. Due to their low water solubility, environmental persistence, and widespread industrial use, they are commonly found in soil and groundwater.

Waste Treatment Plant: A facility that uses a series of tanks, screens, filters, and other treatment processes to remove pollutants from water.

Wastewater: The spent or used water from individual homes or industries.

Watershed: The land area that drains into a stream or other water body.

Water Table: The upper surface of the groundwater.

Weir: A barrier to divert water or other liquids.

Wetland: An area that is regularly saturated by surface or groundwater and, under normal circumstances, is capable of supporting vegetation typically adapted for life in saturated soil conditions. Wetlands are critical to sustaining many species of fish and wildlife. Wetlands generally include swamps, marshes, and bogs. Wetlands may be either coastal or inland. Coastal wetlands have salt or brackish (a mixture of salt and fresh) water, and most have tides, while inland wetlands are non-tidal and freshwater. Coastal wetlands are an integral component of estuaries.

Wildlife Refuge: An area designated for the protection of wild animals, within which hunting and fishing are either prohibited or strictly controlled.

Information Repositories for NPL Sites in Pennsylvania

Information Repositories for NPL Sites in the State of Pennsylvania

Repositories are established for all NPL sites so that the public can obtain additional information related to site activities. Some sites may have more than one repository location, however, the primary site repository is listed below. All public access information pertaining to the site will be on file at these repositories. The quantity and nature of the documentation found in the repositories depends on the extent of activity and cleanup progress for each site and may include some or all of the following: community relations plans, announcements for public meetings, minutes from public meetings, fact sheets detailing activities at sites, documents relating to the selection of cleanup remedies, press releases, locations of other public information centers, and any other documents pertaining to site activities.

Site Name	Site Repository
A.I.W. FRANK/MID-COUNTY MUSTANG	West Whiteland Township Building, 222 North Pottstown Pike, Exton, PA 19341
ALADDIN PLATING	Scott Township Civic Center, Route 247, Montdale, PA 18447
AMBLER ASBESTOS PILES	Wissahickon Valley Library, Ambler Branch, 209 Race Street, Ambler, PA 19002
AMP, INC. (GLEN ROCK FACILITY)	Not Established
AVCO LYCOMING (WILLIAMSPORT DIV.)	Not Established
BALLY GW CONTAMINATION	Borough Business Office, South Seventh Street, Bally, PA 19503
BELL LANDFILL	Not Established
BENDIX FLIGHT SYSTEMS DIVISION	Susquehanna Planning Commission, 31 Public Avenue, County Office Building, Montrose, PA 18801
BERKLEY PRODUCTS CO. DUMP	Not Established
BERKS LANDFILL	Not Established
BERKS SAND PIT	Longswamp Township Office, 1010 Main Street, Mertztown, PA 19539
BLOSENSKI LANDFILL	West Caln Township Building, Route 340, Wagentown, PA 19376
BOARHEAD FARMS	Bucks County Library, Center County Branch, 150 South Pine Street, Doylestown, PA 18901
BRODHEAD CREEK	Stroudsburg Borough Building, Seventh and Sarah Streets, Stroudsburg, PA 18360
BROWN'S BATTERY BREAKING	Hamburg Public Library, 35 North Third Street, Hamburg, PA 19526
BRUIN LAGOON	Bruin Borough Municipal Building, Main Street, Bruin, PA 16022
BUTLER MINE TUNNEL	Pittston City Hall, 35 Broad Street, Pittston, PA 18640
BUTZ LANDFILL	Pocono Township Library, Township Municipal Building, Route 611, Tannersville, PA 18372
C & D RECYCLING	Foster Township Municipal Building, 1000 Wyoming Street, Freeland, PA 18224
CENTRE COUNTY KEPONE	Schlow Memorial Library, 100 East Beaver Avenue, State College, PA 16801
COMMODORE SEMICONDUCTOR	Lower Providence Library, 2765 Egypt Road, Audubon, PA 19403
CRAIG FARM DRUM	Karns City High School Office, Route 268, Karns City, PA 16042
CROYDON TCE	Margaret R. Grundy Memorial Library, 680 Radcliffe Street, Bristol, PA 19007
CRYO CHEM, INC.	Douglass-Berks Township Building, Douglass Drive, Boyertown, PA 19512
DELTA QUARRIES/STOTLER LANDFILL	Altoona Public Library, 1600 Fifth Avenue, Altoona, PA 16602

Information Repositories for NPL Sites in the State of Pennsylvania
(Continued)

Site Name	Site Repository
DORNEY ROAD LANDFILL	Upper Macungie Township Building, Schantz Road, Beinigsville, PA 18031
DOUGLASSVILLE DISPOSAL	Union Township Municipal Building, 177 Center Road, Douglassville, PA 19518
DRAKE CHEMICAL	Ross Public Library, 232 West Main Street, Lock Haven, PA 17745
DUBLIN TCE SITE	Not Established
EAST MOUNT ZION	Springettsbury Township Building, 1501 Mount Zion Road, York, PA 17402
EASTERN DIVERSIFIED METALS	Rush Township Municipal Building, Route 54, Hometown, PA 18252
ELIZABETHTOWN LANDFILL	West Donegal Township Building, 7 West Ridge Road, Elizabethtown, PA 17022
ENTERPRISE AVE	Deleted from the NPL
FISCHER AND PORTER COMPANY	Montgomery County Information Center, 120 South York Road, Hatboro, PA 19040
HAVERTOWN PCP	Haverford Township Free Library, Mill and Darby Roads, Havertown, PA 19083
HEBELKA AUTO SALVAGE YARD	Weisonberg Township Building, Sidestown Road, Fogelsville, PA 18051
HELEVA LANDFILL	North Whitehall Township Building, 600 Levans Road, Coplay, PA 18037
HELLERTOWN MANUFACTURING CO.	Hellertown Municipal Center, 685 Main Street, Hellertown, PA 18055
HENDERSON ROAD SITE	Upper Merion Library, 175 West Valley Forge Road, King of Prussia, PA 19406
HRANICA LANDFILL	Buffalo Township Municipal Building, 109 Bear Creek Road, Sarver, PA 16055
HUNTERSTOWN ROAD	Adams County Public Library, 59 East High Street, Gettysburg, PA 17325
INDUSTRIAL LANE	Mary Meuser Memorial Library, 1803 Northhampton Street, Easton, PA 18042
JACK'S CREEK/SITKIN SMELTING	Not Established
KEYSTONE SANITATION LANDFILL	Hanover Public Library, Library Place, Hanover, PA 17331
KIMBERTON SITE	East Pikeland Township Building, Rappsdam Road, Phoenixville, PA 19460
LACKAWANNA REFUSE	Old Forge Borough Council, 312 South Main Street, Old Forge, PA 18518
LANSDOWNE RADIATION SITE	Lansdowne Public Library, 55 South Lansdowne Avenue, Lansdowne, PA 19050
LEHIGH ELECTRIC & ENGINEERING CO.	Delted from the NPL
LETTERKENNY ARMY DEPOT (PDO)	Letterkenny Public Affairs Office, Room SDSLE-CY, Chambersburg, PA 17201
LETTERKENNY ARMY DEPOT (SE AREA)	Letterkenny Public Affairs Office, Room SDSLE-CY, Chambersburg, PA 17201
LINDANE DUMP	Harrison Township Municipal Building, Municipal Drive, Natrona Heights, PA 15065
LORD-SHOPE LANDFILL	Wilcox Library, 8 Main Street, Girard, PA 16417
MALVERN TCE	Not Established

Information Repositories for NPL Sites in the State of Pennsylvania
(Continued)

Site Name	Site Repository
MCADOO ASSOCIATES	Hazleton Area Public Library, McAdoo Branch, 515 Kelayres Road, McAdoo, PA 18237
METAL BANKS	Not Established
MIDDLETOWN AIR FIELD	Middletown Public Library, 20 North Catherine Street, Middletown, PA 17057
MILL CREEK DUMP	Millcreek Township Building, 3608 West 26th Street, Erie, PA 16506
MODERN SANITATION LANDFILL	Windsor Township Municipal Building, 400 Bahms Mill Road, Red Lion, PA 17356
MOYERS LANDFILL	Lower Providence Township Building, 100 Parklane Drive, Eagleville, PA 19403
MW MANUFACTURING	Thomas Beaver Library, 25 East Market Street, Danville, PA 17821
NAVAL AIR DEVELOPMENT CENTER	Warminster Free Library, 1076 Emma Lane, Warminster, PA 18974
NORTH PENN AREA 1	Borough of Souderton Municipal Building, 331 West Summit, Souderton, PA 18964
NORTH PENN AREA 2	EPA Region III, Public Reading Room, 9th Floor, 841 Chestnut Street, Philadelphia, PA 19107
NORTH PENN AREA 5	Montgomery Township Municipal Building, 623 Cowpatch Road, Montgomeryville, PA 18936
NORTH PENN AREA 6	Lansdale Public Library, Susquehanna Avenue & Vine Street, Lansdale, PA 19446
NORTH PENN AREA 7	Upper Gwynedd Township Municipal Building, Parkside Place, North Wales, PA 19454
NORTH PENN AREA 12	Worcester Township Hall, 1721 Valley Forge Road, Worcester, PA 19490
NOVAK SANITARY LANDFILL	Parkland Community Library, 4422 Walbert Avenue, Allentown, PA 18104
OCCIDENTAL CHEM./FIRESTONE	Pottstown Public Library, 500 High Street, Pottstown, PA 19464
OHIO RIVER PARK	Not Established
OLD CITY OF YORK LANDFILL	Springfield Area Village Library, 35-C North Main Street, Jacobus, PA 17407
OSBORNE LANDFILL	Grove City Community Library, 125 West Main Street, Grove City, PA 16127
PALMERTON ZINC PILE	Palmerton Library, 402 Delaware Avenue, Palmerton, PA 18071
PAOLI RAIL YARD	Paoli Library, 18 Darby Road, Paoli, PA 19301
PRESQUE ISLE	Deleted from the NPL
PUBLICKER INDUSTRIES, INC.	EPA Region III, Public Reading Room, 9th Floor, 841 Chestnut Street, Philadelphia, PA 19107
RAYMARK	Union Library Company of Hatborough, 243 South York Road, Hatsboro, PA 19040
RECTICON/ALLIED STEEL CORP.	East Coventry Township Building, 855 Ellis Woods Road, Pottstown, PA 19464
REESER'S LANDFILL	Deleted from the NPL
RESIN DISPOSAL	Jefferson Borough Municipal Building, 3008 Old Clairton Road, Clairton, PA 15025
REVERE CHEMICAL CO.	Bucks County Library, Center County Branch, 150 South Pine Street, Doylestown, PA 18901

Information Repositories for NPL Sites in the State of Pennsylvania
(Continued)

Site Name	Site Repository
RIVER ROAD LANDFILL	Buhl-Henderson Community Library, 11 North Sharpsville Avenue, Sharon, PA 16146
ROUTE 940 DRUM DUMP	Tobyhanna Township Building, State Avenue, Pocono Pines, PA 18350
SAEGERTOWN INDUSTRIAL AREA	Saegertown Area Library, 320 Broad Street, Saegertown, PA 16433
SALFORD QUARRY	Indian Valley Public Library, 100 East Church Avenue, Telford, PA 18969
SHRIVER'S CORNER	Adams County Public Library, 59 East High Street, Gettysburg, PA 17325
STANLEY KESSLER	Not Established
STRASBURG LANDFIL	Coatsville Area Public Library, 501 East Lincoln Highway, Coatsville, PA 19320
TAYLOR BOROUGH DUMP	Taylor Borough Municipal Building, 122 Union Street, Taylor, PA 18517
TOBYHANNA ARMY DEPOT	Coolbaugh Township Municipal Building, Route 611, Tobyhanna, PA 18466
TONOLLI CORP.	Not Established
TYSONS DUMP	Upper Merion Library, 175 West Valley Forge Road, King of Prussia, PA 19406
VOORTMAN FARM	Deleted from the NPL
WADE (ABM)	Deleted from the NPL
WELSH LANDFILL	Honey Brook Library, Pequea Avenue, Honey Brook, PA 19344
WESTINGHOUSE ELECTRIC CORP. (SHARON)	Buhl-Henderson Community Library, 11 North Sharpsville, Sharon, PA 16146
WESTINGHOUSE ELEVATOR CO. PLANT	Adams County Public Library, 59 East High Street, Gettysburg, PA 17325
WESTLINE SITE	Bradford Area Public Library, 67 West Washington Street, Bradford, PA 16701
WHITMOYER LABS, INC.	Whitmoyer Community Library, 199 North College Street, Myerstown, PA 17067
WILLIAM DICK LAGOONS	West Caln Township Building, Route 340, Wagentown, PA 19376
YORK COUNTY SOLID WASTE LANDFILL	Not Established

* U.S. G.P.O.:1992-311-893:60642