

**NATIONAL PRIORITIES LIST SITES:  
Illinois**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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Office of Program Management  
Washington, D.C. 20460

If you wish to purchase copies of any additional State volumes or the National Overview volume, ***Superfund: Focusing on the Nation at Large***, contact:

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## INTRODUCTION:

### WHY THE SUPERFUND PROGRAM?

**A**s 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, property values depreciated. 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 the 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 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.

In the 10 years 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 at others improperly disposed or stored wastes threatened the health of the surrounding community and the environment.

### EPA Identified More than 1,200 Serious Sites

EPA has identified 1,236 hazardous waste sites as the most serious in the Nation. These sites comprise the "National Priorities List": sites targeted for cleanup under the Superfund. But site discoveries continue, and

## A BRIEF OVERVIEW

EPA estimates that, while some will be deleted after lengthy cleanups, this list, commonly called the NPL, will continue to grow by approximately 100 sites per year, 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 (1,236) are thus a rela-

## INTRODUCTION

tively small subset of a larger inventory of potential hazardous waste sites, but they do comprise the most complex and environmentally compelling cases. EPA has logged more than 32,000 sites on its National hazardous waste inventory, and assesses each site within one year of being logged. In fact, over 90 percent of the sites on the inventory have been assessed. Of the assessed sites, 55 percent have been found to require no further Federal action because they did not pose significant human health or environmental risks. The remaining sites are undergoing further assessment to determine if long-term Federal cleanup activities are appropriate.

### 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.

The 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 hazardous release, or the threat of one. 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 the Superfund's most noted achievements. Where imminent threats to the public or environment were evident, EPA has completed or monitored emergency actions that attacked the most serious threats to toxic exposure in more than 1,800 cases.

The ultimate goal for a hazardous waste site on the NPL is a permanent solution to an environmental problem that presents a serious (but not an imminent) threat to the public or environment. This often requires a long-term effort. In the last four years, 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. And in 1989 more sites than ever reached the construction stage of the Superfund cleanup process. Indeed construction starts increased by over 200 percent between late 1986 and 1989! Of the sites currently on the NPL, more than 500 — nearly half

— have had construction cleanup activity. In addition, over 500 more sites are presently 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. Measuring success by "progress through the cleanup pipeline," EPA is clearly gaining momentum.

### EPA MAKES SURE CLEANUP WORKS

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.

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, 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 still being safeguarded. EPA will correct any deficiencies discovered and 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. EPA's job is to analyze the hazards and deploy the experts, but the Agency needs citizen input as it makes choices for affected communities.

Because the people in a community with a Superfund site will be those most directly affected by hazardous waste problems and cleanup processes, 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.

This State volume and the companion National Overview volume provide general Superfund background information and descriptions of activities at each State NPL site. These volumes are

intended to clearly describe what the problems are, what 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 IN TANDEM

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. The public 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 volume — *Superfund: Focusing on the Nation at Large* — accompanies this State volume. The National Overview 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, the Superfund program's successes in cleaning up the Nation's

serious hazardous waste sites, and the vital roles of the various participants in the cleanup process.

This State volume compiles site summary fact sheets on each State 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 State book gives a "snapshot" of the conditions and cleanup progress that has been made at each NPL site in the State through the first half of 1990. Conditions change as our cleanup efforts continue, so these site summaries will be updated periodically to include new information on progress being made.

To help you understand the cleanup accomplishments made at these sites, this State 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 good reference point from which to review the cleanup status at specific sites. A glossary also is included at the back of the book that defines key terms used in the site fact sheets as they apply to hazardous waste management.

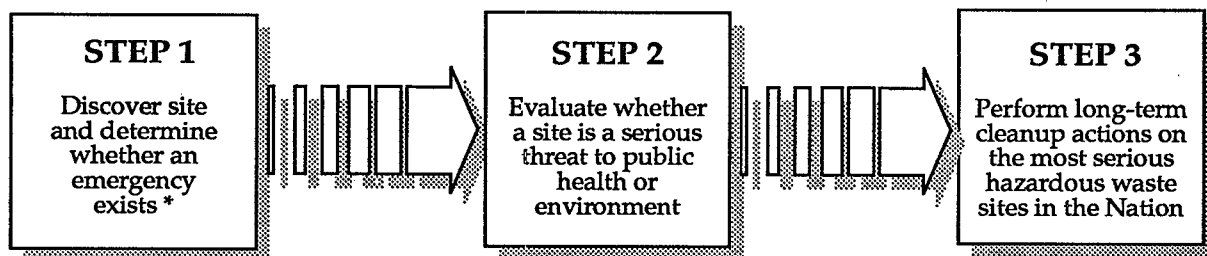


## SUPERFUND:

### HOW DOES THE PROGRAM WORK TO CLEAN UP SITES?

The diverse problems posed by the Nation's hazardous waste sites have provided EPA with the challenge to establish a consistent approach for evaluating and cleaning up the Nation's most serious sites. To do this, EPA 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. EPA has established procedures to coordinate the efforts of its Washington, D.C. Headquarters program offices and its front-line staff in 10 Regional Offices with the State 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 EPA or the State or, under their monitoring, by private parties who are potentially responsible for site contamination.

The process for discovery of the site, evaluation of threat, and 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 below provides a summary of this three step process.



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

FIGURE 1

Although this State 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 up to identifying and cleaning up these most serious uncontrolled or abandoned hazardous waste sites in the Nation. This discovery and evaluation process is the starting point for this summary description.

## How does EPA learn about potential hazardous waste sites?

## What happens if there is an imminent danger?

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

### STEP 1: SITE DISCOVERY AND EMERGENCY EVALUATION

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. Or 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 EPA informed about either 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.

As soon as a potential hazardous waste site is reported, 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

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 figure out what is contaminating the drinking water supply and the best way to clean it up. Or

EPA may determine that there is no imminent danger from a site, so now 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 requires a long-term cleanup action.

Once a site is discovered and any needed emergency actions are taken, 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 like 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 don't 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 32,000 sites maintained in this inventory.

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.

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 EPA can meet the

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

How does EPA use the results of the site inspection?



## SUPERFUND

**How do people find out whether EPA considers a site a national priority for cleanup using Superfund money?**

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, EPA developed the Hazard Ranking System (HRS). The HRS is the scoring system 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 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 EPA's **National Priorities List (NPL)**. That's why there are 1,236 sites on the NPL, but there are more than 32,000 sites in the Superfund inventory. Only NPL sites can have a long-term cleanup paid for from the national hazardous waste trust fund — the Superfund. But the Superfund can and does pay for emergency actions performed at any site, *whether or not it's on the NPL*.

The public can find out whether a site that concerns them is on the NPL by calling their Regional EPA office at the number listed in this book.

The proposed NPL identifies sites that 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 added 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. Updated at least once a year, it's only after public comments are considered that these proposed worst sites are officially added to the NPL.

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



### STEP 3: LONG-TERM CLEANUP ACTIONS

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. So a five-phase "remedial response" process is used to develop consistent and workable solutions to hazardous waste problems across the Nation:

1. Investigate in detail the extent of the site contamination: **remedial investigation**,
2. Study the range of possible cleanup remedies: **feasibility study**,
3. Decide which remedy to use: **Record of Decision or ROD**,
4. Plan the remedy: **remedial design**, and
5. Carry out the remedy: **remedial action**.

This remedial response process is a long-term effort to provide a permanent solution to an environmental problem that presents a serious, but not an imminent 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 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. But 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 is information that allows EPA to select the cleanup strategy that is best suited to a particular site or to determine that no cleanup is needed.

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

### How are cleanup alternatives identified and evaluated?

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.

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 carefully compared. 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 use treatment technologies to destroy principal site contaminants. But remedies such as containing the waste on site or removing the source of the problem (like leaking barrels) are often 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 carefully considered 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. 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.

The public has a minimum of 30 days to comment on the proposed cleanup plan after it is published. These comments can either be written or given verbally at public meetings that EPA or the State are required to hold. Neither 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 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.

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 6 months to 2 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

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

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

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

site, special plans for environmental protection, worker safety, regulatory compliance, and equipment decontamination.

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 decontaminate them — an action that takes limited time and money. In most cases, however, a remedial action may involve different and expensive 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, a remedial cleanup action takes an average of 18 months to complete and costs an average of \$26 million per site.

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 the **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 completed".

It's not until a site cleanup meets all the goals and monitoring requirements of the selected remedy that 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 can actually be deleted from the NPL. Deletions that have occurred are included in the "Construction Complete" category in the progress report found later in this book.



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 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 EPA, and must meet the same standards required for actions financed through the Superfund.

Because these enforcement actions can be lengthy, 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 for repaying the money EPA spends in cleaning up the site.

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

**Can EPA make parties responsible for the contamination pay?**



## HOW TO:

## USING THE STATE VOLUME

**T**he 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 National Priorities List (NPL) and their locations, as well as the conditions leading to their listing ("Site Description"). They 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 on 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 following two pages show a generic fact sheet and briefly describes the information under each section. The square "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.

### Icons in the *Threats and Contaminants* Section



**Contaminated Groundwater** resources 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. (Pollution is usually periodic and involves contaminated dust particles or hazardous gas emissions.)



**Contaminated Soil and Sludges** on or near the site.



**Threatened or contaminated Environmentally Sensitive Areas** in the vicinity of the site. (Examples include wetlands and coastal areas, 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 are planned or underway.



**Remedy Selected** indicates that site investigations have been concluded and 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 — are currently underway.



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

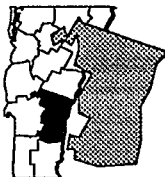
## Site Responsibility

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

### SITE NAME

STATE

EPA ID# ABC00000000



EPA REGION  
CONGRESSIONAL DIST  
County Name  
Location

Aliases:

### Site Description

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## NPL Listing History

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

Site Responsibility:

NPL LISTING HISTORY

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Threats and Contaminants



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### Cleanup Approach

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### Response Action Status



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Site Facts:

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### Environmental Progress



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## 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.



## WHAT THE FACT SHEETS CONTAIN

### 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. Throughout the site description and other sections of the site summary, technical or unfamiliar terms that are *italicized* are presented in the glossary at the end of the book. Please refer to the glossary for more detailed explanation or definition of the terms.

### 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 are also described. Specific contaminants and contaminant groupings are italicized and explained in more detail in the glossary.

### Cleanup Approach

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

### 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 are often 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.

### 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 EPA to achieve site cleanup or other facts pertaining to community involvement with the site cleanup process are reported here.

# How To

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 is always being made at NPL sites, and EPA will periodically update the Site Fact Sheets to reflect recent actions and publish updated State volumes.

## 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. EPA is committed to involving the public in the decisionmaking process associated with hazardous waste cleanup. The Agency solicits input

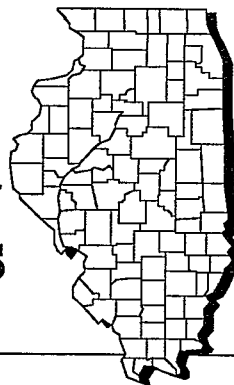
from area residents in communities affected by Superfund sites. Citizens are likely to be affected not only by hazardous site conditions, but also by the remedies that combat them. Site cleanups take many forms and can affect communities in different ways. Local traffic may be rerouted, residents may 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 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 to know what the community can realistically expect once the cleanup is complete.

EPA wants to develop cleanup methods that meet community needs, but the Agency can only 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.

# NPL Sites in State of Illinois



Illinois is bordered by Wisconsin to the north, Lake Michigan and Indiana to the east, Iowa and Missouri to the west, and Kentucky to the south. The State covers 56,345 square miles and consists of prairie and fertile plains throughout, with open hills in the southern regions. Illinois experienced a 1.6 percent increase in population during the 1980s and currently has approximately 11,614,000 residents, ranking 6th in U.S. populations. Principal State industries include manufacturing, wholesale and retail trade, finance, insurance, agriculture, and foods. Illinois manufactures machinery, electric and electronic equipment, primary and fabricated metals, printing and publishing and chemical products.

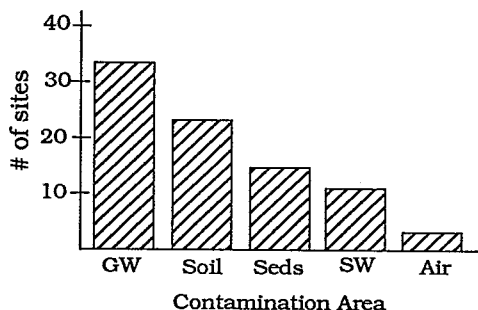
## How Many Illinois Sites Are on the NPL?

Proposed Sites	9
Final Sites	29
Deleted Sites	<u>0</u>
	<b>38</b>

## Where Are the NPL Sites Located?

Cong. District 04, 21	1 site
Cong. District 17, 19, 20, 22	2 sites
Cong. District 15	3 sites
Cong. District 10, 13	4 sites
Cong. District 14	6 sites
Cong. District 16	11 sites

## How are Sites Contaminated and What are the Principal\* Chemicals ?



**Groundwater:** Volatile organic compounds (VOCs), heavy metals (inorganics) and polychlorinated biphenyls (PCBs).



**Soil:** Heavy metals (inorganics), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), creosotes (organics), and radiation.

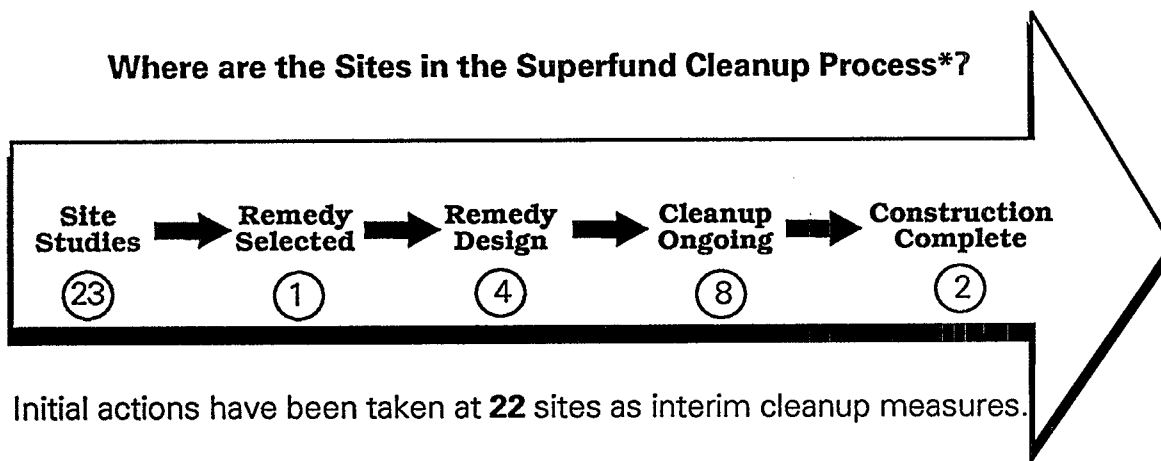


**Surface Water and Sediments:** Surface Water and Sediments Heavy metals (inorganics), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).



**Air:** Radiation, petrochemicals, and asbestos.

### Where are the Sites in the Superfund Cleanup Process\*?



### Who Do I Call with Questions?

The following pages describe each NPL site in Illinois, providing specific information on threats and contaminants, cleanup activities, and environmental progress. Should you have questions, please call one of the offices listed below:

Illinois Superfund Office	(217) 782-6411
EPA Region V Superfund Office	(312) 886-7456
EPA Region V Public Relations Office	(312) 353-2072
EPA Superfund Hotline	(800) 424-9346
EPA Public Information Office	(202) 477-7751

\*Cleanup status reflects phase of site activities rather than administrative accomplishments.



# ***The NPL Progress Report***

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The following Progress Report lists the State 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 (➡) which indicates the current stage of cleanup at the site.

Large and complex sites are often 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 is currently 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.
- ➡ An arrow in the "Site Studies" category indicates that an investigation to determine the nature and extent of the contamination at the site is currently ongoing or planned to begin in 1991.
- ➡ An 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 in the Progress Report are discontinued at the "Remedy Selection" step and resume in the final "Construction Complete" category.
- ➡ An arrow at the "Remedial Design" stage indicates that engineers are currently designing the technical specifications for the selected cleanup remedies and technologies.
- ➡ An arrow marking the "Cleanup Ongoing" category means that final cleanup actions have been started at the site and are currently underway.
- ➡ A 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 may currently be undergoing long-term pumping and treating of groundwater, operation and maintenance or monitoring to ensure that the completed cleanup actions continue to protect human health and the environment.

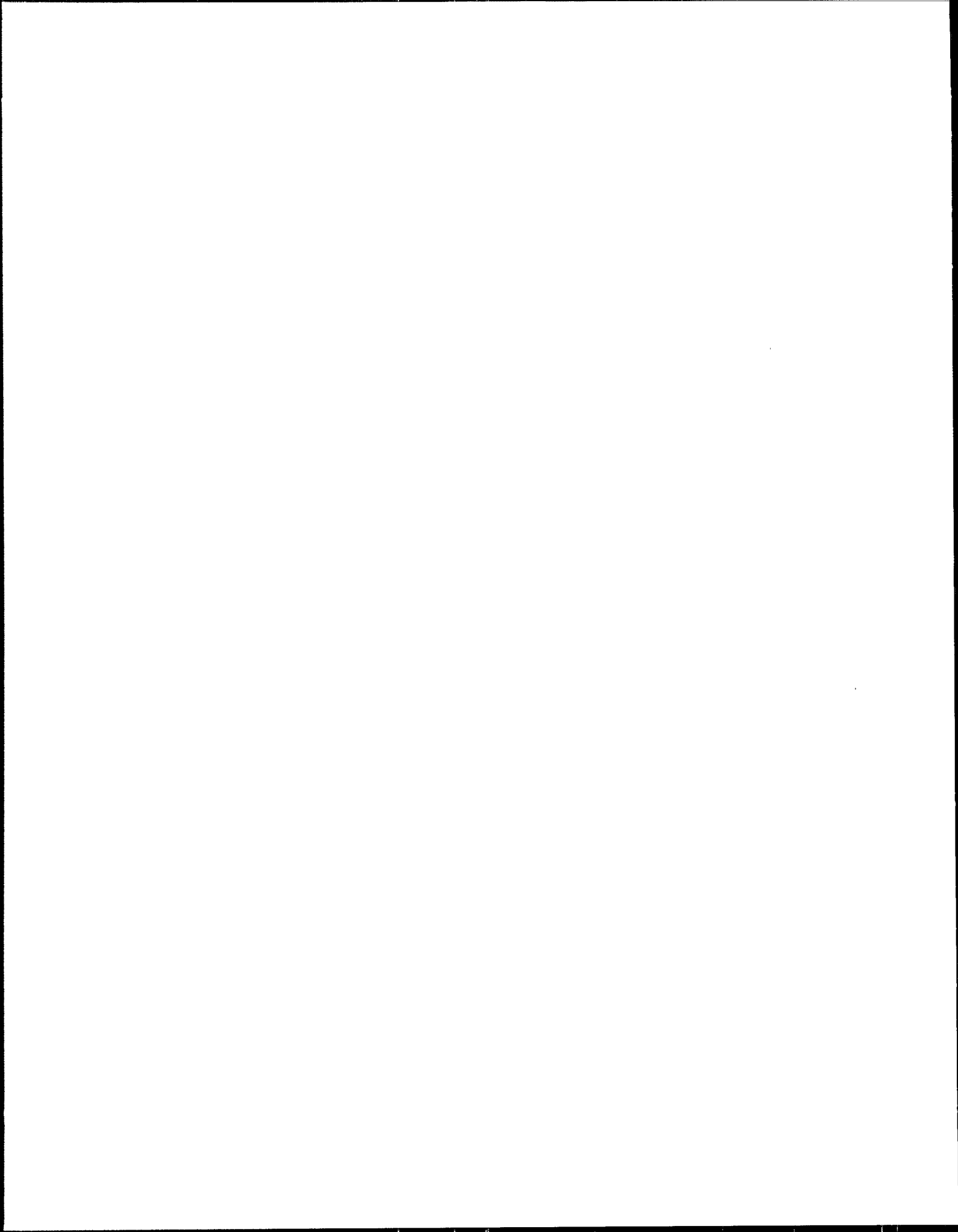
The sites are listed in alphabetical order. Further information on the activities and progress at each site is given in the site "Fact Sheets" published in this volume.

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## Progress Toward Cleanup at NPL Sites in the State of Illinois

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete
1	A & F MATERIALS RECLAIMING, INC.	CUMBERLAND	Final	09/08/83	➡	➡	➡	➡	➡	
4	ACME SOLVENT RECLAIMING, INC.	WINNEBAGO	Final	09/08/83		➡	➡	➡	➡	
6	ADAMS COUNTY QUINCY LDFL 2 & 3	ADAMS	Prop.	06/24/88	➡	➡				
8	AMOCO CHEMICALS (Joliet LDFL)	WILL	Final	02/21/90		➡				
10	BELOIT CORP.	WINNEBAGO	Prop.	06/24/88		➡				
12	BELVIDERE MUNICIPAL LANDFILL	BOONE	Final	09/08/83	➡	➡	➡	➡	➡	
14	BYRON SALVAGE YARD	OGLE	Final	09/08/83	➡	➡	➡	➡	➡	
17	CENTRAL ILLINOIS PUBLIC SERVICE CO.	CHRISTIAN	Prop.	06/24/88	➡	➡				
19	CROSS BROTHERS PAIL RECYCLING	KANKAKEE	Final	09/08/83	➡	➡	➡	➡		
21	DUPAGE COUNTY LDFL/BLACKWELL	DUPAGE	Final	02/21/90	➡	➡				
23	GALESBURG/KOPPERS CO.	KNOX	Final	09/08/83	➡	➡	➡	➡		
25	H.O.D. LANDFILL	LAKE	Final	02/21/90		➡				
27	ILADA ENERGY CO.	ALEXANDER	Final	10/04/89	➡	➡				
29	INTERSTATE POLLUTION CONTROL,	WINNEBAGO	Final	03/31/89		➡				
31	JOHNS-MANVILLE CORP.	LAKE	Final	09/08/83	➡	➡	➡	➡	➡	➡
33	JOLIET ARMY AMMO PLT (LAP AREA)	WILL	Final	03/31/89		➡				
35	JOLIET ARMY AMMO PLT (MFG. AREA)	WILL	Final	07/21/87	➡	➡				
37	KERR-MCGEE (KRESS CREEK)	DUPAGE	Prop.	10/15/84		➡				
39	KERR-MCGEE (REED-KEPPLER PARK)	DUPAGE	Prop.	10/15/84	➡	➡				

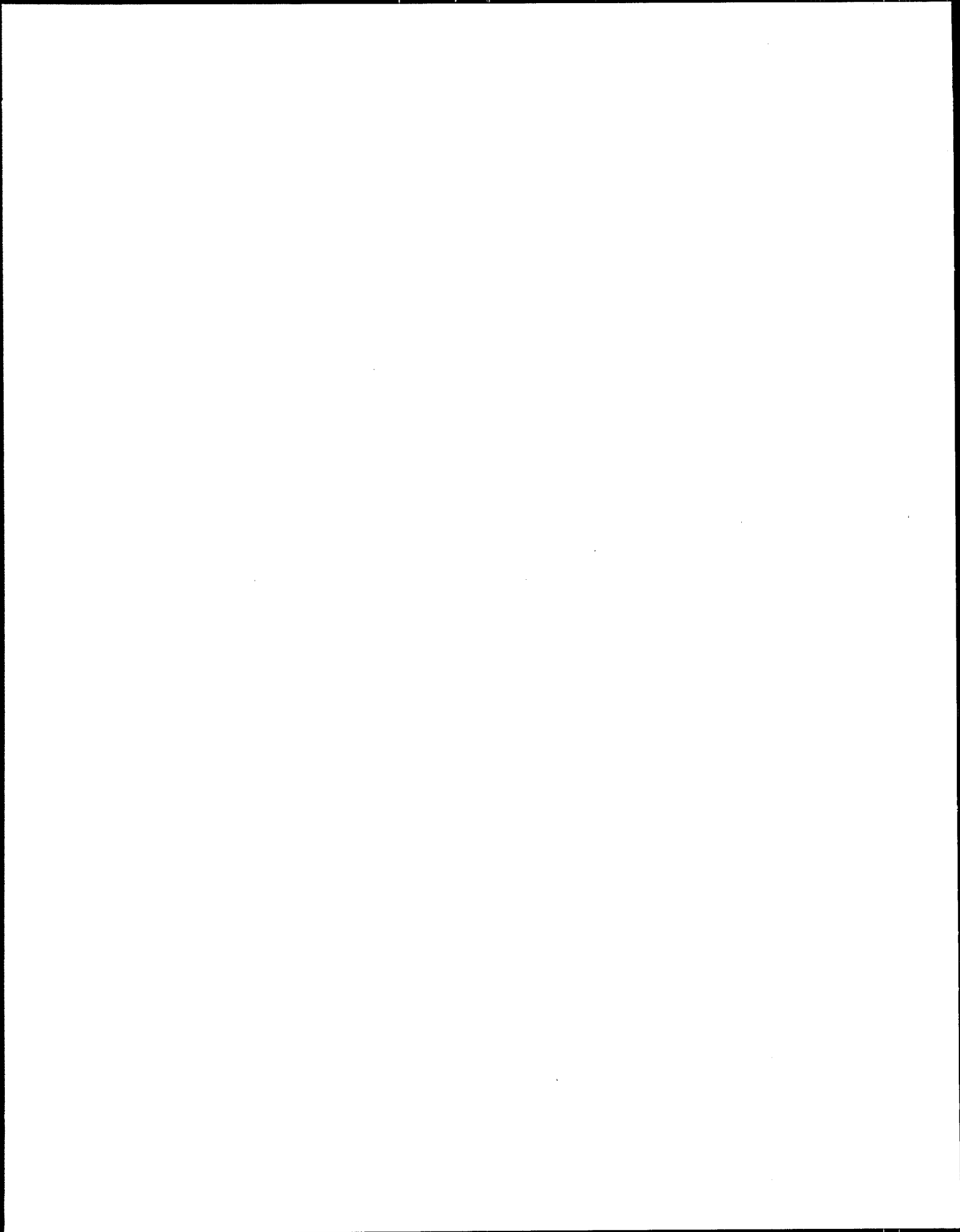
Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete
41	KERR-MCGEE (RESIDENTIAL AREAS)	DUPAGE	Prop.	10/15/84	➡	➡				
43	KERR-MCGEE (SEWAGE TREATMENT)	DUPAGE	Prop.	10/15/84	➡	➡				
45	LASALLE ELECTRICAL UTILITIES	LASALLE	Final	09/08/83	➡	➡	➡	➡	➡	
47	LENZ OIL SERVICE, INC.	COOK	Final	10/04/89	➡	➡				
49	MIG/DEWANE LANDFILL	BOONE	Prop.	10/26/89		➡				
51	NL INDUSTRIES/TARACORP LEAD SMELT MADISON		Final	06/10/86		➡	➡			
53	OUTBOARD MARINE CORP.	LAKE	Final	09/08/83		➡	➡	➡		
55	PAGEL'S PIT	WINNEBAGO	Final	06/10/86		➡				
57	PARSON'S CASKET HARDWARE CO.	BOONE	Final	07/21/87	➡	➡				
59	PETERSEN SAND & GRAVEL	LAKE	Final	06/10/86	➡	➡	➡			➡
61	SANGAMO ELECTRIC DUMP	WILLIAMSON	Final	03/31/89		➡	➡	➡		
63	SAVANNA ARMY DEPOT ACTIVITY	CARROLL	Final	03/31/89		➡				
35	S.E. ROCKFORD GW CONTAMINATION	WINNEBAGO	Final	03/31/89	➡	➡				
67	TRI-COUNTY LDFL/WASTE MGMT OF IL	KANE	Final	03/31/89		➡				
77	VELSICOL CHEMICAL (ILLINOIS)	CLARK	Final	09/08/83	➡	➡	➡	➡	➡	
71	WARNER ELECTRIC BRAKE & CLUTCH	WINNEBAGO	Prop.	06/24/88	➡	➡	➡	➡	➡	
73	WAUCONDA SAND & GRAVEL	LAKE	Final	09/08/83		➡	➡	➡	➡	
75	WOODSTOCK MUNICIPAL LANDFILL	MCHENRY	Final	10/04/89		➡				
77	YEOMAN CREEK LANDFILL	LAKE	Final	03/31/89	➡	➡				





NPL:

SITE  
FACT  
SHEETS



# A & F MATERIAL RECLAIMING, INC.

ILLINOIS

EPA ID# ILD980397079



**REGION 5**  
CONGRESSIONAL DIST. 19  
Cumberland County  
Greenup

## Site Description

The A & F Material Reclaiming, Inc. site covers nearly 4 acres in Greenup. The facility began operations in 1977 and processed waste materials including oil, *sludge*, and caustic and sulfuric *acid* into fuel oil and fire retardant chemicals. In 1978, four storage *lagoons* filled and began to overflow, contaminating soil and drainage pathways leading to the Embarras River. Twelve steel storage tanks containing a mixture of waste oils, sludges, spent caustics and acids, contaminated water, and other waste products also were located on site. These tanks failed on several occasions, releasing their contents into the surrounding environment. The facility was closed in 1980. The area surrounding the site is agricultural, residential, commercial, municipal, and forestland. The county fairgrounds are southwest of the site and are used year-round for the boarding and care of horses. The Village of Greenup has a population of approximately 2,000 people. The Embarras River is 1/2 mile away from the site and is used for fishing and livestock watering.

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

### NPL LISTING HISTORY

Proposed Date: 07/16/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater contains low levels of *volatile organic compounds* (VOCs), sulfates, *phenols*, heavy metals, and petroleum products. *Sediments* in the drainage ditch contained *polynuclear aromatic hydrocarbons* (PNAs). Soils were contaminated with phenols and benzoic acid. As a result of cleanup activities in 1985, the only remaining health threats may result from accidental ingestion or direct contact with contaminated groundwater.

## Cleanup Approach

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

### Response Action Status



**Immediate Actions:** When a lagoon overflowed in 1980, the EPA repaired the lagoon dikes, increased the freeboards, and cleaned the surrounding areas. In 1982, the EPA increased the freeboards by treating approximately 502,600 gallons of water with activated carbon filters and discharged the treated water into the Embarras River. In 1983, when the lagoons were close to overflowing again, the EPA treated and discharged 1,018,000 gallons of water into the Embarras River. About 7,000 cubic yards of sludge were moved from Lagoons 2, 3, and 4 into Lagoon 1. Lagoons 2 and 4 were *backfilled* with clean soil. All the sludge could not easily be moved from Lagoon 3 to Lagoon 1, so a sludge *cell* was built for the waste in Lagoon 3. A temporary *cap* was placed over the consolidated sludge. In 1983, the EPA selected an initial measure to quickly reduce health threats at the site. This measure included removing and disposing of all contaminated bulk liquid, oil, and drums in a federally approved facility. The EPA completed this initial measure in 1985.



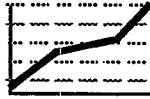
**Soils:** In 1985, the EPA selected a remedy to clean up the soils by excavating and disposing of all contaminated soils; monitoring the groundwater; cleaning and removing all on-site equipment and buildings; testing and disposing of soil underneath the buildings if it was found to be contaminated; grading the site; and removing the fence surrounding the site. The potentially responsible parties, under EPA monitoring, finished all the cleanup activities relating to the contaminated soil in 1985.



**Groundwater:** In 1986, the EPA selected a remedy to clean up the groundwater by establishing a monitoring program to ensure that all residual groundwater contamination remaining after the 1985 cleanup will steadily decrease to safe levels by natural dilution and purging to the Embarras River. In addition, institutional controls will be implemented to ensure that drinking water wells are not installed in contaminated groundwater areas during the period of natural purging and dilution. Procedures also will be established for a regular review of the monitoring data until safe levels are reached. The potentially responsible parties, under EPA oversight, are designing the technical specifications for the groundwater monitoring. Once the design phase is completed in 1990, monitoring wells will be installed.

**Site Facts:** In 1984, a partial *Consent Decree* was entered into by the EPA and four potentially responsible parties. Under the terms of the decree, the companies agreed to undertake cleanup at the site. In 1989, four potentially responsible parties signed a Consent Decree for final cleanup at the site.

## ***Environmental Progress***



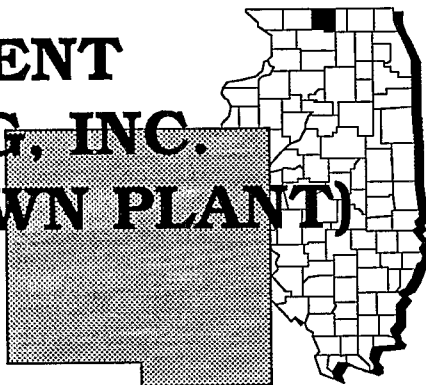
The immediate actions of treating contaminated lagoon water and removing contaminated materials have significantly reduced the threat to the public and the environment. The cleanup of contaminated soils at the A & F Material Reclaiming, Inc. site has been completed and has further reduced site contamination levels. A monitoring program, currently being designed, will monitor the natural decline of contaminated groundwater.



# ACME SOLVENT RECLAIMING, INC. (MORRISTOWN PLANT)

ILLINOIS

EPA ID# ILD053219259



**REGION 5**  
CONGRESSIONAL DIST. 16  
Winnebago County  
5 miles southeast of Rockford

## Site Description

The 20-acre Acme Solvent Reclaiming, Inc. (Morristown Plant) site was used as a drum storage and disposal area for wastes generated by Acme's solvent distillation units. From 1960 to 1972, the site consisted of seven waste disposal *lagoons* and open storage of 10,000 to 15,000 drums. Although operations at the site were temporarily discontinued in 1969 because of concern expressed by the Winnebago County Department of Public Health, site operations resumed in 1971 and continued until 1972. Paints, oils, solvents, and *sludges* are among the wastes known to have been deposited at the site. Waste disposal practices consisted of emptying drums into the lagoons and storing the empty drums at various open areas on the site. Sludge and other non-recyclable materials were pumped from tanker trucks into the lagoons. After receiving several reports in 1972, the Illinois Environmental Protection Agency investigators found violations of environmental regulations, including operating a waste disposal facility without a permit, open burning of refuse, and dumping liquids in a manner that posed a threat to the groundwater. The State ordered the site cleaned up in 1972. The site was closed in 1973, after State inspections indicated that the majority of drums were being crushed and buried at the site, and waste in the lagoons was being covered rather than removed for off-site disposal. In 1981, methane gas *migration* into some homes located between the Acme Solvent site and the nearby Pagel's Pit Landfill site led to well water testing by the County. *Volatile organic compounds* (VOCs) were found in four private drinking water wells. Approximately 5,500 people live within 3 miles of the site. There are several surface water bodies in the area surrounding the site including a small tributary stream which flows into Killbuck Creek, the Kishwaukee River, and the Rock River. Only the Rock River is known to be used as a public water supply.

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

### NPL LISTING HISTORY

Proposed Date: 07/16/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater contains various VOCs. Soil contains VOCs, phthalates, *polychlorinated biphenyls* (PCBs), and heavy metals including lead and chromium. People who touch or accidentally ingest contaminated groundwater or soil may be at risk. If contaminants *leach* from the site into the nearby stream or creek, wildlife in or around the water may be harmed.

## Cleanup Approach

This site is being addressed in two *long-term remedial phases* focusing on cleanup of soils and cleanup of the groundwater.

### Response Action Status



**Soils:** In 1985, the EPA selected a remedy to clean up the waste and the soil by providing an interim alternate water supply to affected residences through the installation of home *carbon treatment* units; excavating and incinerating waste materials and contaminated soils and disposing of them in a federally approved facility; continuing the investigation into bedrock contamination and its cleanup; and continuing the investigation of contaminated groundwater and performance of pump tests to evaluate the effectiveness of controlling the contaminant *plume*. In 1987, Acme, under EPA monitoring, installed home carbon treatment units in five residences with contaminated wells. The residents were provided with free bottled water until the units could be used for drinking water purposes. In addition, the parties potentially responsible for site contamination excavated and disposed of 42,000 tons of contaminated materials.



**Groundwater:** The potentially responsible parties, under EPA monitoring, are investigating the groundwater contamination at the site. Once the investigation is completed in 1990, measures will be recommended to clean up the site.

**Site Facts:** In 1986, the potentially responsible parties entered into a *Consent Order* with the EPA to study and develop cleanup alternatives for the site.

## Environmental Progress



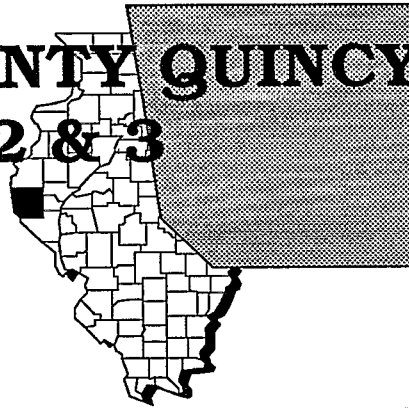
The provision of an alternate water supply and disposal of contaminated materials have greatly reduced the potential for exposure to contaminated materials at the Acme Solvent Reclamation site while further cleanup activities continue and permanent remedies are sought for groundwater contamination.



# ADAMS COUNTY QUINCY LANDFILLS 2 & 3

ILLINOIS

EPA ID# ILD980607055



REGION 5  
CONGRESSIONAL DIST. 20  
Adams County  
1/2 miles west of Quincy

## Site Description

In 1973 and 1975, the Adams County Quincy Landfills 2 and 3 were permitted to operate as solid waste disposal sites. Landfill 2 covers 11 3/4 acres and Landfill 3, approximately 40 acres. From 1972 to 1978, the Quincy landfills received the majority of the county's waste, including combustible and hazardous materials. The Illinois Environmental Protection Agency (IEPA) records show that the City of Quincy accepted liquid industrial waste for disposal into unlined pits until the liquids could be pumped into the covered portions of the site. Wastes disposed of included solvents, *acids*, *sludges*, spent organic solvents used in *degreasing*, wastewater treatment sludges from electroplating operations, hydraulic oil, machine coolant, thinners, acetone, and toluene. An estimated 23,000 drums of hazardous waste were accepted. Groundwater samples taken by the IEPA in 1985 and 1986 showed contamination by various *volatile organic compounds* (VOCs). In 1985 and 1986, the IEPA also sampled two nearby wells that were found to be contaminated and were closed. Approximately 300 people obtain drinking water from private wells within 3 miles of the site.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

## Threats and Contaminants



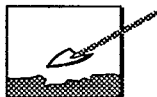
The groundwater is contaminated with VOCs and selenium. *Leachate seeps* from the surface of the landfill are contaminated with VOCs and *polychlorinated biphenyls* (PCBs). Drinking contaminated groundwater or touching the contaminated leachate may be potential health threats. The site is not completely fenced.



## 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

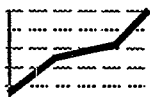


**Immediate Action:** An alternate water supply was provided to residents near the site.



**Entire Site:** In 1987, the parties potentially responsible for the site contamination began an investigation to determine the nature and extent of contamination and to identify alternatives for cleanup of the site.

### Environmental Progress



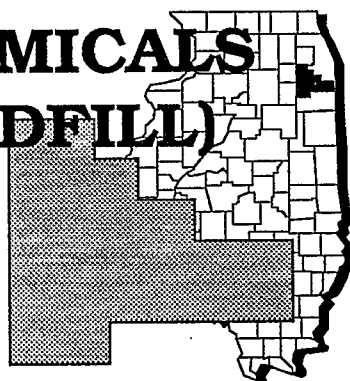
Providing an alternate water supply has eliminated the potential of exposure to hazardous substances in the drinking water and will continue to protect households near the Adams County Quincy Landfills 2 and 3 until final cleanup activities are completed.



# AMOCO CHEMICALS (JOLIET LANDFILL)

ILLINOIS

EPA ID# ILD002994259



**REGION 5**  
CONGRESSIONAL DIST. 17  
Will County  
6 miles southwest of Joliet

## Site Description

Amoco Chemicals manufactures chemicals on a property in a commercial and industrial area along Route 6 near Route 66, southwest of Joliet. Approximately 5 million cubic feet of wastes, including organics, inorganics, heavy metals, *acids* and mixed municipal refuse, were disposed of in a 26-acre *landfill* on the property from 1958 to 1976. Some ignitable wastes and organic acid residues were disposed of in drums in the landfill. A *leachate* collection system was installed in 1975 under a permit from the Illinois Environmental Protection Agency (IEPA). Until the leachate collection system was installed, leachate from the landfill flowed into an inlet to the adjacent Des Plaines River. The leachate now is treated in Amoco's wastewater treatment plant before it is discharged to the river. In 1976, Amoco covered the landfill with 2 feet of compacted clay and seeded it with perennial grasses. The landfill was officially closed in 1978. Tests conducted by the IEPA in 1974, and by Amoco in 1982, indicated that monitoring wells *downslope* of the site were contaminated. A shallow *aquifer* underlies the site, and the Des Plaines river is used for recreational activities. Approximately 1,000 people obtain drinking water from private wells drilled into the shallow aquifer within 3 miles of the site. An estimated 1,100 to 2,300 individuals live within 3 miles of the site. A residential area is located 1/2 mile northwest of the plant.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 02/21/90

## Threats and Contaminants



The groundwater is contaminated with *volatile organic compounds* (VOCs) including benzene, toluene, and xylenes. The leachate is contaminated with the heavy metals cadmium, copper, lead, and chromium. Coming in direct contact with contaminated groundwater may pose a potential health threat. The site is open to the river, making it possible for people and animals to come into direct contact with hazardous substances.

## Cleanup Approach

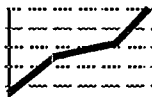
The site is being addressed in a single *long-term remedial phase* focusing on cleanup of the entire site.

## Response Action Status



**Entire Site:** An investigation into the extent of groundwater, leachate, and possible surface water contamination and alternative remedies is scheduled to begin at the end of 1990. Following the investigation and the evaluation of results, the EPA will select the appropriate cleanup technologies.

## Environmental Progress



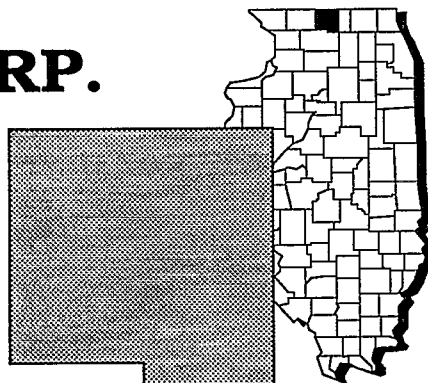
After placing the Amoco Chemical site on the NPL, the EPA performed preliminary evaluations and determined that the site does not pose an imminent threat to the public or the environment while the investigations leading to the selection of permanent cleanup remedies are taking place.



# BELOIT CORP.

ILLINOIS

EPA ID# ILD021440375



**REGION 5**  
CONGRESSIONAL DIST. 16  
Winnebago County  
Village of Rockton

## Site Description

The 175-acre Beloit Corp. site in Rockton operates as a plant for paper-making machine manufacturing and as a research and development facility for designing and demonstrating the machines to prospective customers. The facility purchases clean virgin pulp to make multi-layered paper products. The wastewater and paper fibers generated from the manufacturing process are disposed of in three unlined surface *impoundments*. The paper fiber *sediment* from the bottom of the impoundments is spread on the ground, as allowed by the State through a permit issued in 1983. Tests by the company in 1985 found *volatile organic compounds* (VOCs) in on-site monitoring wells and in nearby private wells. Approximately 15,000 people obtain drinking water from public and private wells located within 3 miles of the site. The Rock River is less than 50 feet from the site's surface impoundments.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

## Threats and Contaminants



On-site pond sediments, soils, groundwater, and surface water are contaminated with VOCs. Potential health threats to people include drinking contaminated groundwater and pond water, accidental ingestion of contaminated soil and pond sediments, and coming in direct contact with contaminated groundwater, pond water, pond sediments, and soils.

## Cleanup Approach

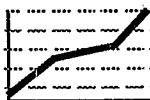
The site is being addressed in a single *long-term remedial phase* directed at cleanup of the entire site.

## Response Action Status



**Entire Site:** The EPA and the State currently are working together on a groundwater monitoring program in the Rockford area. An investigation that will define the contaminants of concern and recommend effective alternatives for final cleanup is currently under way and is planned to be completed in 1992.

## Environmental Progress

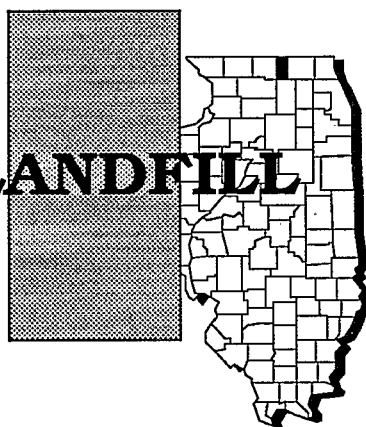


The EPA and the State are concurrently conducting investigations which will lead to the selection of the final remedies to clean up the Beloit Corp. site.



# BELVIDERE MUNICIPAL LANDFILL

ILLINOIS  
EPA ID# ILD980497663



**REGION 5**  
CONGRESSIONAL DIST. 16  
Boone County  
Adjacent to the City of Belvidere

## Site Description

The Belvidere Municipal Landfill site occupies 139 acres, 19 acres of which were used for a *landfill*. The City of Belvidere operated the landfill and received municipal wastes from 1939 to 1965. During this period, the site was used to dispose of industrial wastes, *sludge* from the city sewage treatment plant, paint and oil sludge, unknown liquid wastes, and other sludges. The current landfill cover is composed of silt and sand and varies in thickness up to 36 inches. An area just west of the landfill was found to contain buried drums that were filled with liquids or sludges. The Kishwaukee River borders the site, and an active gravel pit is adjacent to the northern portion of the site. West Pond and East Pond lie to the east of the site, and Spencer Park lies southeast of the site. *Polychlorinated biphenyls* (PCBs) were found in the West Pond, the Kishwaukee River, and groundwater near the river. Approximately 14,000 people live within 3 miles of the site. The site is located 1/2 mile from six residences that use groundwater as a supply for drinking water. Most of the county is rural; however, Belvidere has an industrial base which includes the manufacture of cars, furniture, metal fasteners, and several light industries.

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

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater and soils contain *volatile organic compounds* (VOCs) including benzene, toluene, and xylenes; *polycyclic aromatic hydrocarbons* (PAHs); PCBs; nitrite; and heavy metals including chromium. Surface water contains low levels of VOCs including *trichloroethylenes* (TCEs), nitrate, and heavy metals. None of these contaminants exceed established Federal standards. Access to the landfill and drum disposal areas is not adequately restricted, so children playing on the landfill or drum disposal areas could be exposed to contaminants in soil and dust. People who eat fish from the Kishwaukee River could be exposed to PCBs. The shallow groundwater under the site is transporting significant levels of contaminants toward the Kishwaukee River. People who swim in the Spencer Park ponds or the river could be exposed to contaminants through 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

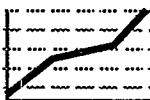


**Initial Actions:** In 1986, the EPA staged and sampled 110 drums. Workers crushed and relocated 65 empty drums to a new holding area for disposal, and contaminated soils were excavated and loaded into boxes. The drums and contaminated soils were compiled into one waste pile and disposed of at a federally approved landfill. The EPA solidified liquids with cement and transported them off site for disposal.



**Entire Site:** In 1988, the EPA chose the following remedies to address contamination at the site: (1) placing a cap over the landfill; (2) sampling the soil in the drum disposal area and cleaning up the PCBs; (3) removing highly contaminated soil off site to be burned, and the remaining lesser-contaminated soils to be *capped*; (4) installing a pump and treat system to remove contaminants from groundwater and discharging the treated water to the City's water treatment plant; (5) monitoring the groundwater in and around the site; (6) installing an upgraded fence around the landfill; (7) instituting deed restrictions to control unacceptable activities and construction on site; and (8) installing flood control measures to prevent erosion of the cap and the contents of the landfill. The EPA approved the technical designs for the cleanup in March 1990. The potentially responsible parties initiated site work in mid-1990. Construction is expected to be completed by fall 1991.

## Environmental Progress



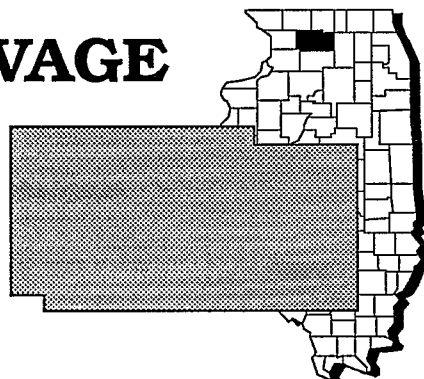
By removing the contaminated drums and their contents to an approved disposal facility, the EPA greatly reduced the risk of exposure to hazardous materials while the cleanup work and construction of the selected remedies are taking place.



# BYRON SALVAGE YARD

ILLINOIS

EPA ID# ILD010236230



**REGION 5**  
CONGRESSIONAL DIST. 16  
Ogle County  
4 miles southwest of Byron

Alias:  
Byron Johnson

## Site Description

The Byron Salvage Yard site encompasses both the Byron Johnson Salvage Yard and Dirks Farm near Byron. During the 1960s and the early 1970s, the salvage yard accepted miscellaneous wastes and debris for disposal, including drums of electroplating wastes, oil sludges, cutting wheels, solvents, and scrap metal. Industrial waste dumping occurred during periods of heavy rainfall, so, much of the waste was carried off site by the surface water *runoff*. Cyanide-containing plating waste was sprayed onto the roads in and around the salvage yard. In 1976, the State found cyanide and heavy metals in the soil, surface water, and groundwater. Approximately 5,000 people live in Byron. The closest residence to the salvage yard is approximately 100 yards away. About 50 people live within 1 mile of the site, and all residences used private wells supplied by groundwater until the State extended a municipal waterline to a majority of the affected residences in 1988 and 1989. The area is rural, and the site is bordered by a forest preserve, farmlands, and a nuclear power plant. The property is bisected by two ravines that drain surface water runoff into the south branch of Woodland Creek, which flows into the Rock River.

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

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



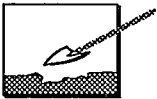
Groundwater is contaminated with *volatile organic compounds* (VOCs) such as vinyl chloride and *trichloroethylene* (TCE) and heavy metals including cadmium, chromium, nickel, and lead. Soil is contaminated with cyanide, toluene, xylene, and heavy metals including antimony. Meyer's Spring contains trace levels of cyanide and TCE. Groundwater is the only source of drinking water in the area; therefore, people who drink or touch contaminated well water may be at risk. Those who trespass on the site and touch or accidentally ingest contaminated soil may potentially suffer adverse health effects.



## Cleanup Approach

The site is being addressed in five stages: initial actions and four *long-term remedial phases* focusing on cleanup of the soils and drums, installation of home carbon units, cleanup of the groundwater, and cleanup of Dirk's Farm.

### Response Action Status



**Initial Actions:** As an initial action in 1984, the EPA constructed a fence to prohibit access to the site. In 1988, the EPA discovered floating contaminants in the groundwater and installed a skimmer in a pumping well to remove the pollutants.



**Soils and Drums:** In 1985, the State selected a remedy to clean up the soil and the buried drums by disposing of all surface and buried drums, excavating and disposing of highly contaminated soils, and treating soils containing less than 100 parts per million of cyanide with sodium hypochlorite. The State completed all the cleanup actions for the drums and soil in 1986.



**Home Carbon Units:** In 1986, following the installation of carbon filtration units for 10 houses in the Acorn Road subdivision, the EPA selected a remedy consisting of installing whole-house carbon filtration systems in affected residences, continuing sampling to ensure that the carbon filtration is effective, installing replacement carbon filters when needed, and disposing of the spent filters at a federally approved facility. The EPA completed these actions in 1986. The EPA plans to remove the carbon filters in the future because the homes have been connected to the municipal water supply since 1988.

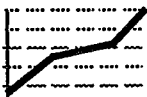


**Groundwater Contamination:** In 1989, the EPA selected a remedy to clean up the groundwater by: (1) extending the Byron municipal water supply system to 27 additional residences; (2) removing all wastes generated during an EPA study; (3) installing, sampling, and analyzing monitoring wells near the Rock River; (4) monitoring surface water and groundwater on a long-term basis; (5) plugging monitoring wells not selected for long-term use; and (6) limiting public exposure to groundwater by plugging abandoned residential wells and implementing deed restrictions and mandatory hook-ups to the public water supply. The EPA is designing the technical specifications for the remaining actions. Once the design phase is completed in 1991, the cleanup activities are scheduled to begin.



**Dirk's Farm:** During investigations of the salvage yard, the EPA also discovered Dirk's Farm, an adjacent area, to be contaminated. The EPA is thoroughly investigating this new area to determine the extent and type of contamination. This study is expected to be completed in 1992, and at that time, measures to clean up the area will be selected by the EPA.

**Site Facts:** In 1983, the EPA and the State signed a *Cooperative Agreement* through which the State agreed to study the type and extent of the site contamination. The EPA is undertaking legal actions against the *potentially responsible parties* to recover the costs of the cleanup.

**Environmental Progress**

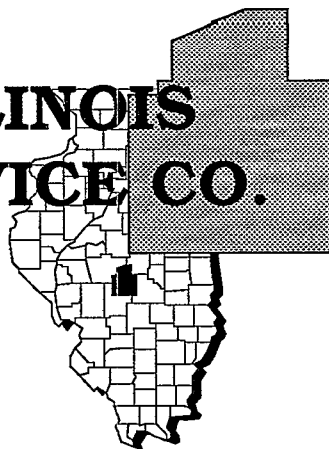
The EPA has completed numerous cleanup actions at the Byron Salvage Yard site including the installation of a fence and *carbon treatment* units in homes with wells, and the removal of contaminated drums and soils. The EPA has also initiated a study on the adjacent contaminated area discovered during investigations of the site. All these actions have significantly reduced the threat of exposure to hazardous materials on the site while the remaining cleanup activities are taking place.



# CENTRAL ILLINOIS PUBLIC SERVICE CO.

ILLINOIS

EPA ID# ILD981781065



**REGION 5**  
CONGRESSIONAL DIST. 20  
Christian County  
Taylorville

**Alias:**  
**CIPS**

## Site Description

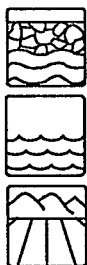
The Central Illinois Public Service Co. (CIPS) site is a former coal *gasification* plant covering 1 acre in Taylorville. The gas plant was constructed in 1892 and was operated by the Taylorville Gas and Electric Company until 1912, when it was acquired by CIPS. Operations stopped in 1932, and CIPS sold the property in 1961. The gasification process generated coal tar, which contains *polynuclear aromatic hydrocarbons* (PNAs), and other impurities that were periodically removed and sold or given away for use as road oil, roofing tar, or a pesticide. When CIPS abandoned the facility, the aboveground structures were demolished; however, underground tanks containing tar and other equipment remained in place. The tanks were covered with miscellaneous debris and fill. Contamination at the site was first suspected when Apple Construction Company, which acquired the site in 1985, excavated a trench for a septic tank drainage line. Workers noticed strong odors, discoloration of excavated soils, and a dark viscous material throughout the soil. CIPS was notified of the problem and began an investigation. In 1986, CIPS confirmed the presence of PNAs and *volatile organic compounds* (VOCs) in soils and groundwater. Contaminants have also been found in the Sangamon River. CIPS is monitoring groundwater and surface water, as well as *sediment* and fish in the Seaman Estate Pond. Approximately 12,700 people live within a 3-mile radius of the site, and about 4,500 people live within 1 mile. Three municipal water wells are located 3 miles from the property. These wells serve as an alternate supply for the City of Taylorville. The main water supply for the city is Lake Taylorville, about 4 miles southeast 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: 06/24/88

## Threats and Contaminants



Groundwater and sediments from a drainage culvert and a private lake are contaminated with VOCs including benzene, toluene, and xylene. Before the soil was excavated, it was contaminated with naphthalene, fluorene, and various VOCs. Surface water *runoff* has transported contaminants off the site. People who touch or accidentally ingest contaminated soil, groundwater, surface water, or sediments may suffer adverse health effects. Contaminants may accumulate in fish in the Seaman Estate Pond, and if eaten, the fish may be harmful to human health.

## 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:** Under Illinois Environmental Protection Agency supervision, 3 underground structures, 9,000 cubic yards of contaminated on-site soil, and 3,000 cubic yards of off-site soil were removed. A water main was completed by CIPS to supply water to residents within a 1/2 mile of the site, and the ownership was transferred to the City of Taylorville. The building on the site was also demolished, and a chain-link fence with a locking gate was installed around the perimeter of the site.



**Entire Site:** CIPS began a thorough investigation of the site under State supervision. This investigation, scheduled to be completed in 1992, will determine if additional soil needs to be excavated and the most effective method to treat the contaminated groundwater, surface water, and sediments. Once the studies are completed, the EPA will review and select cleanup alternatives for the site.

**Site Facts:** In 1986, the State issued an order to CIPS and Apple Contractors, directing the companies to thoroughly investigate the site and to remove the buried structures.

## Environmental Progress



The removal of the underground structures, contaminated soils, construction of a fence to limit site access, and the demolition of the contaminated building on the Central Illinois Public Service Co. site greatly reduced the potential for exposure to hazardous materials while the studies leading to a final selection of cleanup alternatives are being conducted.



# CROSS BROTHERS PAIL RECYCLING (PEMBROKE)

ILLINOIS

EPA ID# ILD980792303



**REGION 5**  
CONGRESSIONAL DIST. 15  
Kankakee County  
Pembroke Township

## Site Description

The 20-acre Cross Brothers Pail Recycling (Pembroke) site, located about 14 miles southeast of Kankakee, is an abandoned drum and pail reclamation facility. The container reclamation facility covered 10 acres of the site. From 1961 until 1980, pails and drums were recycled at the site by burning out the residue using hazardous waste solvents as fuel and then sandblasting and painting them. Container contents were emptied onto the ground, and the containers were buried. Soil and groundwater became contaminated during these operations. Site investigations led to the discovery of over 10,000 mostly empty 5-gallon pails, 10 acres of contaminated soil, at least 10 covered trenches of unknown wastes, and a *plume* of contaminated groundwater leaving the site. A house trailer is occupied and maintained at the site. There are 3,500 people living within 3 miles of the site. The site is adjacent to properties that are either pasture land or individual residential lots. The contaminated groundwater plume has moved to the north and has contaminated two residential water wells. These two wells have been abandoned and replaced with deeper wells. Local residents use groundwater as their drinking water supply and possibly as a livestock and agriculture water supply. There are at least 12 privately owned water supply wells within 1/2 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: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater is contaminated with *volatile organic compounds* (VOCs) such as benzene, toluene, and xylenes and heavy metals including lead. Soil is contaminated with *polychlorinated biphenyls* (PCBs) and VOCs. The greatest health threat to people is through direct exposure to the contaminated groundwater moving off site into nearby residential, livestock, and agricultural water supply wells. Trespassers may also be at risk through accidentally ingesting, inhaling, or making direct contact with contaminated soil. Sandy soils provide the ongoing potential for the *migration* of groundwater contamination.

## 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



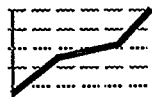
**Immediate Actions:** Under advisement by the State, the potentially responsible parties deepened contaminated wells to provide clean drinking water. As an initial measure in 1985, a partial fence was placed around the site. Most of the drums, pails, and contaminated soils, considered to be the sources of groundwater contamination, were removed from the site. The EPA selected soil cleanup technologies to address site contamination, including off-site disposal of surface and buried waste materials and visibly contaminated soil.



**Entire Site:** In 1989, the EPA selected cleanup technologies to address site contamination which include: (1) resampling localized areas of the PCB-contaminated soil area for eventual removal and incineration; (2) installing a groundwater collection system to capture the contaminated groundwater plume; (3) treating on-site groundwater to achieve cleanup levels; (4) cleaning soil from an estimated 3 1/2-acre area by flushing with water; and (5) applying a 6-inch vegetative cover to the remaining site area. A fence surrounding the entire site will be constructed. Water discharged from groundwater cleanup will be treated and used for the soil flushing operation. The potentially responsible parties, under EPA monitoring, are preparing the technical specifications and design for the selected cleanup technologies. Cleanup activities are expected to begin once the design phase is completed in 1991.

**Site Facts:** In 1980, the Kankakee County Circuit Court ordered the potentially responsible parties to discontinue recycling operations and to clean up the site surface. In 1983, the EPA signed a *Cooperative Agreement* with the State to conduct an investigation into the nature and extent of contamination at the site.

## Environmental Progress



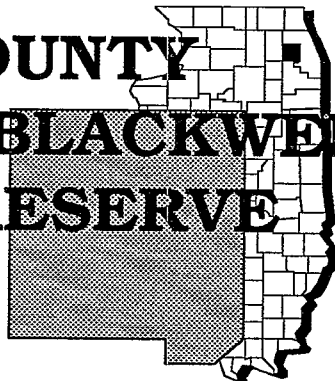
The affected area wells have been deepened to provide safe drinking water, and most of the contaminated containers and soils have been removed and disposed of in an approved facility. The EPA has selected the remedies for the permanent cleanup of the Cross Brothers site, and the actual cleanup activities are scheduled to begin once the design phase has been completed.



# DUPAGE COUNTY LANDFILL/BLACKWELL FOREST PRESERVE

ILLINOIS

EPA ID# ILD980606305



**REGION 5**  
CONGRESSIONAL DIST. 14  
Dupage County  
Warrenville

## Site Description

The Dupage County Landfill/Blackwell Forest Preserve site covers 40 acres within the 1,235-acre Blackwell Forest Preserve. From 1965 to 1970, the Forest Preserve District and DuPage County operated the *landfill*, accepting demolition debris, municipal refuse, and unknown amounts of potentially hazardous waste. When the site was closed, the Forest Preserve District covered it with a *clay cap*. Private and public wells within 3 miles of the site provide drinking water to 44,000 people. The Forest Preserve District continues to monitor the landfill. A lake close to the landfill has been closed to swimming as a precautionary measure.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 02/21/90

## Threats and Contaminants



In 1984, *volatile organic compounds* (VOCs) were detected in numerous monitoring wells installed around the site. Because the site was capped after *closure* of the landfill, there do not appear to be any potential threats to people using the site for recreational purposes.

## 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



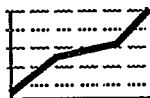
**Immediate Actions:** In 1987, the Forest Preserve District began pumping *leachate* from collection manholes. Since the 1970s, over 50 monitoring wells have been installed around the site.



**Entire Site:** The Forest Preserve District initiated an investigation in 1989, under EPA monitoring, to determine the type and extent of contamination at the site and to identify alternative technologies for the cleanup.

**Site Facts:** In 1989, the Forest Preserve District signed an *Administrative Order on Consent* with the EPA and the State to perform an investigation into site contamination.

### Environmental Progress



The installation of monitoring wells and removal of leachate from the Dupage County Landfill/Blackwell Forest Preserve site have greatly reduced the potential for exposure to contaminated materials while cleanup activities are being planned.

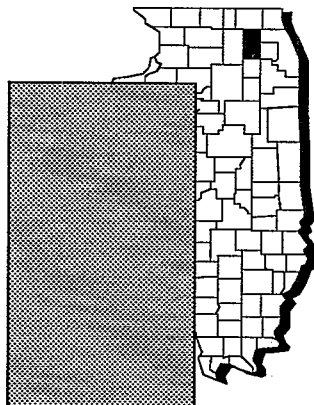




# GALESBURG/ KOPPERS CO.

ILLINOIS

EPA ID# ILD990817991



**REGION 5**  
CONGRESSIONAL DIST. 17

Knox County  
2 miles south of Galesburg

**Alias:**  
**Burlington Northern Rail Yard**

## Site Description

The Galesburg/Koppers Co. site covers 105 acres near Galesburg. The Burlington Northern Railroad Company operated the site as a railroad tie treatment plant from 1907 until 1966. In 1966, the Koppers Company leased the production plant from the railroad and assumed operation of the facility. Treatment operations consisted of pressure-treating the railroad ties with a mixture of *creosote* and coal tar or creosote and fuel oil. The facility treats 600,000 to 800,000 cross ties a year. From 1971 to 1976, *pentachlorophenol* (PCP) was used in the treatment process. Key contaminated areas at the site include a *slurry* pond, a northern and southern creosote *lagoon*, a PCP-contaminated lagoon, a waste pile storage area, two *backfilled* drainage ditches, and two former spray wastewater fields. Contamination has been found in soil, groundwater, surface water, and *sediment*. Between 1966 and 1980, lagoons were cleaned and closed, used oil was recycled, and the wastewater spray fields were constructed. Approximately 60,000 residents live in Galesburg. The area near the site is residential, agricultural, and commercial/industrial. The economy is dependent on agricultural products such as hogs, beef cattle, and corn. Brush Creek, an intermittent stream located adjacent to the site, flows southeast to Lake Bracken, which is about 2 miles downstream.

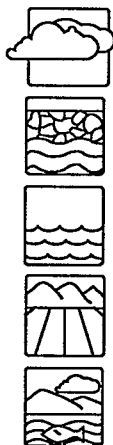
**Site Responsibility:** This site is being addressed through a combination of Federal, State, and *potentially responsible parties'* actions.

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Air contains *volatile organic compounds* (VOCs), *phenols*, and *petrochemicals*. Groundwater contains VOCs, asbestos, heavy metals, phenols, and PCP. Sediments contain heavy metals, VOCs, *polychlorinated biphenyls* (PCBs), and pesticides. Soil is contaminated with dioxins, phenol, and *polycyclic aromatic hydrocarbons* (PAHs). Surface water contains VOCs, asbestos, and heavy metals. Fish in Lake Bracken are contaminated with PCBs and PAHs. People who touch or accidentally ingest contaminated groundwater, soil, surface water, or sediments may be at risk. On-site workers and nearby residents may potentially be exposed to contaminants by inhaling dust. Those who eat contaminated fish from Lake Bracken may suffer adverse health effects. Wildlife in and around the lake and Brush Creek also may be harmed by the pollutants.

## Cleanup Approach

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

### Response Action Status

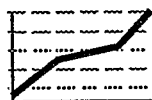


**Interim Actions:** The PCP lagoon was pumped dry, and the water was treated in 1983. The contaminated soils from the lagoons were also removed and disposed of off site. Excavated soil from the area around the treatment building is being stored in piles on site.



**Entire Site:** In 1989, the State selected a remedy to clean up the site by: (1) excavating contaminated soil and consolidating it on site and then removing contaminants with a biological treatment called *bioremediation*; (2) constructing shallow groundwater interceptor trenches and deep pumping wells to extract groundwater; (3) pre-treating the extracted groundwater using an existing wastewater treatment system to remove contaminants and then discharging the treated water to the Galesburg Sanitary District treatment works for final treatment; (4) monitoring the groundwater and soil to ensure the effectiveness of the cleanup; and (5) implementing land use restrictions. Koppers Company, under State supervision, is designing the technical specifications for the cleanup of the site. The design phase is scheduled for completion in 1991, after which, the cleanup activities will begin.

### Environmental Progress



The cleanup and treatment of the soils and water from the PCP-contaminated lagoon on the Galesburg/Koppers Co. site have reduced the potential for exposure to hazardous materials on the site while the technical design phase is being completed and the final cleanup activities are begun.



# H.O.D. LANDFILL

ILLINOIS

EPA ID# ILD980605836



**REGION 5**  
CONGRESSIONAL DIST. 13

Lake County  
Antioch

**Alias:**  
**CCD Landfill**

## Site Description

The H.O.D. Landfill covers 50 acres of an 80-acre parcel of land. Liquid organic and drummed wastes were disposed of at the *landfill* from 1963 to 1984, and the site is now closed. One tanker dumped wastes containing high levels of *polychlorinated biphenyls* (PCBs). Groundwater *downslope* of the site contains zinc, lead, and cadmium. The closest residence is within 100 feet of the landfill. Approximately 14,300 people live within 3 miles of the site. Approximately 40 private wells used for domestic water purposes are located within 3 miles of the landfill. Five public water supply wells are in the vicinity, with the closest being 600 feet away, and these wells serve approximately 4,600 people. The site is adjacent to a freshwater *wetland*. Sequoit Creek is adjacent to the landfill and flows into a series of lakes used for recreation.

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

### NPL LISTING HISTORY

Proposed Date: 09/18/85

Final Date: 02/21/90

## Threats and Contaminants



Groundwater is contaminated with various *volatile organic compounds* (VOCs) and heavy metals including cadmium, lead, zinc, and manganese. People who touch or drink contaminated groundwater may potentially be at risk. If contaminants *seep* from the site into Sequoit Creek or the wetlands area, wildlife in or around the water may be harmed.

## 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:** An investigation to determine the nature and extent of contamination at the site is scheduled to begin in 1990. The investigation will sample groundwater, soil, *sediments*, surface water, and air to measure the levels of contamination. Once the investigation is completed, measures will be recommended to clean up the landfill.

## Environmental Progress



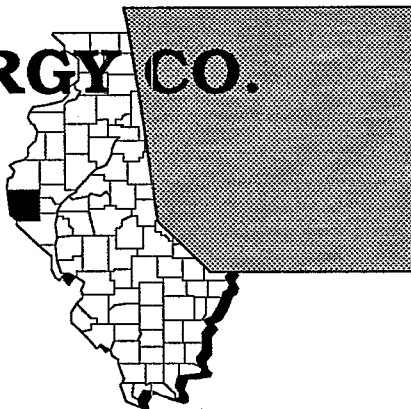
After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the H.O.D. Landfill site while further investigations are being planned.



# ILADA ENERGY CO.

ILLINOIS

EPA ID# ILD980996789



## REGION 5

CONGRESSIONAL DIST. 22

Alexander County  
East Cape Girardeau

### Site Description

The 20-acre Ilada Energy Co. site is located in East Cape Girardeau. The Federal Government operated a fuel oil storage/transfer terminal on the site from 1942 until the early or mid-1950s and placed oil in 17 tanks with a capacity in excess of 11 million gallons. In the late 1950s, the Government deeded the site back to its original owner. The site remained vacant until 1981, when the Ilada Energy Co. purchased and operated it as a waste oil reclamation facility from 1981 to 1983. As part of its operations, Ilada removed bottom *sediment* and water from the waste oil and blended it to obtain the desired heat content. The "cleaned" oil was then sold to commercial enterprises. The Illinois Environmental Protection Agency (IEPA) conducted an inspection of the operations and facilities at the site in 1982. During this visit, IEPA found that Ilada was improperly storing, handling, mixing, and disposing of waste oils contaminated with *polychlorinated biphenyls* (PCBs). Ilada burned the PCB-laden waste oil in an on-site boiler. Of the 17 tanks on site, 11 contained oil contaminated with chlorinated organic solvents, metals, and other elemental constituents of PCBs. The IEPA also observed oily material spilling and leaking onto the ground, under the valves of the tanks, and in the designated loading and unloading areas. Although the site borders the Mississippi River, it is protected against floods by a levee that borders the southern edge of the site. The site is located in a sparsely populated area that is relatively flat. An estimated 500 people obtain drinking water from wells located within 3 miles of the site. Approximately 130 people live within 1 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: 06/24/88

Final Date: 10/04/89

### Threats and Contaminants



On-site groundwater is contaminated with the heavy metals zinc and arsenic. Liquid oily wastes are contaminated with *volatile organic compounds* (VOCs), PCBs, and heavy metals including lead, arsenic, and zinc. On-site surface soils are contaminated with PCBs and heavy metals. Trespassers could be directly exposed to site-related contaminants because valves on the storage tanks containing the wastes are readily accessible. The potential exists for site-related contaminants to *migrate* off site into the sole source drinking water supply of the area residents. Additionally, agricultural lands and the nearby Mississippi River could be adversely affected by oil wastes and associated 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



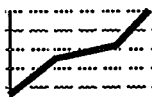
**Immediate Actions:** The IEPA installed six monitoring wells on the site in 1986. Subsequent sampling of these wells showed that two of them were contaminated with arsenic. The EPA ordered the potentially responsible parties to remove the PCB-contaminated waste oil tanks and decontaminate the tanks, associated piping, and on-site structures. Cleanup activities were started in 1989. Access to the site is restricted by a fence surrounding the site. Both of the site's access gates have been padlocked and posted with warning signs by the EPA, and the site is guarded on a 24-hour basis.



**Entire Site:** The potentially responsible parties, under monitoring by the EPA, have begun to conduct a study into the nature and extent of contamination at the site and the most effective methods of addressing this contamination. The study is expected to be completed in 1992.

**Site Facts:** The EPA filed a complaint against the Ilada Energy Co. in 1983 for PCB violations under the Toxic Substances Control Act. The company signed a *Consent Decree* with the EPA to clean up the site but abandoned it before taking any action.

## Environmental Progress



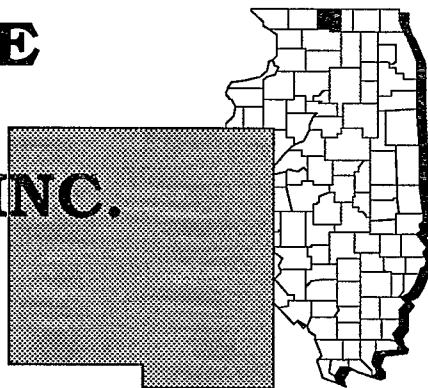
By constructing a fence and posting a 24-hour guard at the Ilada Energy Co. site, the potential for people to be exposed to hazardous materials has been greatly reduced. The removal of contaminated tanks and their contents is currently under way, and further studies leading to solutions for permanent cleanup of the entire site are taking place.



# INTERSTATE POLLUTION CONTROL, INC.

ILLINOIS

EPA ID# ILT180011975



**REGION 5**  
**CONGRESSIONAL DIST. 16**  
Winnebago County  
Rockford

Alias:  
**Roto-Rooter Service, Inc.**

## Site Description

The Interstate Pollution Control site is 1 to 2 acres in size and is located in a heavily industrialized section of Rockford. Interstate Pollution Control, a division of Roto-Rooter Service, Inc., operated a hazardous waste storage facility at the site from 1974 until 1982. Activities performed by Interstate Pollution Control included hauling, and sometimes storing, waste oils, solvents, and cyanide-containing plating wastes from at least 20 to 25 local industries. Most recent activities at the site include reclaiming or "cleaning" waste oil for resale. Both the Illinois and U.S. Environmental Protection Agencies have documented a history of poor operating practices at the site, including using unlined surface *impoundments*, and leaking storage tanks and drums. Due to pressure from these two agencies, the Interstate Pollution Control removed the leaking drums and contaminated soil from the site and transported them to an EPA-regulated hazardous waste storage facility. The EPA detected various *volatile organic compounds* (VOCs) in off-site wells located *downgradient* of the site in 1986. An estimated 155,000 people obtain drinking water from city of Rockford wells located within 3 miles of the site.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/31/89

## Threats and Contaminants



Off-site groundwater, located in wells downgradient of the site, is contaminated with VOCs. On-site soil contains heavy metals such as cadmium, copper, selenium and thallium. Since parts of the fence surrounding the site are broken, it is possible for trespassers to come into direct contact with contaminants on site. If site-related contaminants should *migrate* from the affected off-site wells into the municipal drinking water supply of the City of Rockford, people could be exposed to contaminants when consuming or coming into direct contact with drinking water.

## Cleanup Approach

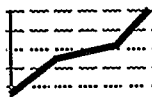
The site is being addressed in a single *long-term remedial phase* focusing on cleanup of the entire site.

## Response Action Status



**Entire Site:** The State will enter into negotiations with the *potentially responsible parties* for conducting an investigation into the nature and extent of site contamination. This investigation is expected to begin in late 1990. After all the various alternatives for cleaning up the site are considered, the most effective remedies will be chosen.

## Environmental Progress



After listing the Interstate Pollution Control, Inc. site on the NPL, the EPA and the State performed preliminary evaluations and determined that the site does not pose an imminent threat to the surrounding population or the environment while the investigations leading to the selection of final remedies for the site are taking place.





# JOHNS-MANVILLE CORP.

ILLINOIS

EPA ID# ILD005443544



**REGION 5**  
CONGRESSIONAL DIST. 10  
Lake County  
Waukegan, 37 miles north of Chicago

## Site Description

The Johns-Manville Corp. site covers 120 acres on a 300-acre parcel of land in Waukegan. The plant presently produces a wide range of building materials. Since 1922, waste materials containing primarily asbestos, the heavy metals lead and chrome, and the *volatile organic compound* (VOC) xylene have been deposited in a variety of pits. No asbestos or lead is presently used in the manufacturing process. The active waste disposal pits include the *sludge* disposal pit, which receives dredged materials from the on-site wastewater treatment system, and the miscellaneous disposal pit, into which asbestos- and non-asbestos-containing wastes are deposited. Waste materials cover a large portion of the disposal area and form a *berm* that appears to be 25 to 30 feet high. The disposal site is located in an industrial area, and the nearest residential area is about 1/2 mile northwest of the site. The population of Waukegan is 67,500. Approximately 1,800 day workers and 450 night workers are at the site during a work day, and about 5,000 people are present in the general area during the day shifts. The site is bordered by Lake Michigan and Illinois Beach State Park, both of which are used daily for recreation. Local fishermen use a pier located between the Johns-Manville and Commonwealth Edison facilities.

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

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Air contains asbestos fibers. Groundwater contains asbestos, arsenic, and several VOCs. Waste materials and sludge are contaminated with asbestos, heavy metals and VOCs. The most significant threat to human health is through the inhalation of asbestos fibers. The site is dusty during dry periods and poses health concerns to the surrounding communities and to the on-site workers. Asbestos in the waste materials is a limited public health concern, unless it is dispersed by wind or water. People who drink the contaminated groundwater may suffer adverse health effects.

## 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

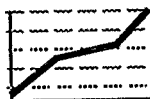


**Immediate Actions:** The asbestos pit was closed in mid-1989, and the soil cover was completed in May 1990 by the potentially responsible parties.



**Entire Site:** In 1987, the EPA selected a remedy to clean up the site, which includes: (1) disposing of the asbestos-containing material generated from the reconstruction activities in the asbestos disposal pit prior to *closure*; (2) monitoring the soil cover, groundwater, surface water, and the air; (3) clearing the debris on the site; (4) fencing the eastern boundary and posting warning signs; (5) closing a small ditch and the open area at the miscellaneous disposal pit; and (6) sampling to ensure the effectiveness of the remedy. All cleanup activities outlined in the remedy have been completed. A work plan for additional soil cover was completed in 1990. High asbestos levels in groundwater and surface water may trigger a contingency plan for their cleanup.

### Environmental Progress



By sealing off the asbestos pit and covering the contaminated soil to reduce the *migration* of asbestos fibers into the air and groundwater, the potential for exposure to hazardous materials at the Johns-Manville site has been significantly reduced. The EPA has completed cleanup activities and will continue to monitor the soil cover and asbestos levels. Any additional actions required to ensure the safety of the surrounding community will be taken by the EPA.

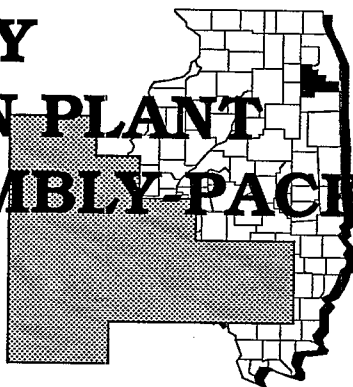


# JOLIET ARMY AMMUNITION PLANT (LOAD-ASSEMBLY-PACKING AREA)

ILLINOIS

EPA ID# IL0210090049

REGION 5  
CONGRESSIONAL DIST. 15  
Will County  
Joliet



## Site Description

The Joliet Army Ammunition Plant (Load-Assembly-Packing Area) covers 22 square miles on an inactive Army munitions installation in Joliet. The installation is divided into two major functional areas: the Manufacturing Area, which is a separate National Priorities List site; and the Load-Assembly-Packing Area. From the early 1940s until 1977, high explosive artillery projectiles, aerial bombs, and a variety of ammunition component items were loaded, assembled, and packaged at this site. Other activities included testing of ammunition, washout and renovation of projectiles, and burning and demolition of explosives. Since 1977, the plant has been maintained in non-operating standby condition by Uniroyal, the contractor/operator. The main source of wastewater produced by the facility was "pink water" created by the washout of rejected bombs and from washing the equipment and floors. Approximately 250 people live within 3 miles of the site and depend on groundwater for drinking water. The nearest residence is less than 1/2 mile away. About 40 water supply wells are used for drinking water within 3 miles of the plant. The surface water on the site flows into the Des Plaines and Kankakee Rivers, and Kemery Lake is within the site area. About 2,500 acres of the site are used for commercial agriculture. An active land-leasing program exists, with more than 80 agricultural and cattle grazing leases being exercised. The surface water is used for recreational activities, and a fishing program exists on site.

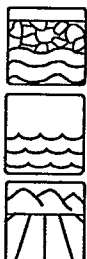
**Site Responsibility:** This site is being addressed through Federal actions.

### NPL LISTING HISTORY

Proposed Date: 04/10/85

Final Date: 03/31/89

## Threats and Contaminants



Groundwater, *sediments*, soils, and surface water are contaminated with trinitrotoluene (TNT), other explosive by-products, and heavy metals including lead, mercury, chromium, and cadmium. Potential health threats include touching or accidentally ingesting contaminated groundwater, soil, surface water, or sediments. In addition, contaminants may accumulate in fish, waterfowl, livestock, and commercial agricultural products and can pose a health threat to those who eat them.

## Cleanup Approach

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

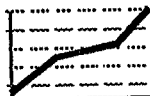
## Response Action Status



**Entire Site:** In 1989, the Army began investigating the type and extent of contamination at the plant. The investigation is scheduled for completion in 1993. Once completed, the most timely and effective measures will be recommended for site cleanup.

**Site Facts:** An *Interagency Agreement* was signed with the EPA in mid-1989. Under the terms of this agreement, the Army must investigate and clean up the contamination found on the site. The site is participating in the *Installation Restoration Program (IRP)*, a specially funded program developed in 1978 by the Department of Defense (DOD) to identify, control, and investigate hazardous wastes on military or other DOD installations.

## Environmental Progress



The Army is conducting investigations that will lead to the selection of final cleanup actions for the Joliet Army Ammunition Plant (Load-Assembly-Packing Area) site. After preliminary evaluation, it has been determined that the site does not present an immediate threat to the surrounding population or the environment.



# JOLIET ARMY AMMUNITION PLANT (MANUFACTURING AREA)

ILLINOIS

EPA ID# IL7213820460



**REGION 5**  
CONGRESSIONAL DIST. 15  
Will County  
Joliet

## Site Description

The Joliet Army Ammunition Plant (Manufacturing Area) covers 14 square miles of an inactive Army munitions facility in Joliet. The site consists of two areas: the manufacturing area that produced constituent chemicals and explosive materials, and the Load-Assembly-Packing Area, which is listed as a separate site on the National Priorities List. More than 4 billion pounds of explosives were produced in the manufacturing area from the early 1940s until 1977. Since 1977, the area has been maintained in non-operating standby condition by Uniroyal, the contractor/operator. The manufacturing facility consists of a TNT ditch complex, where process wash and wastewater were transported off site to be processed at water treatment facilities; the Red Water Area consisting of storage tanks, incinerators, evaporators, a lined lagoon, and the incinerator ash piles; and the Flashing Ground. During the manufacturing process, contaminated process waters and chemical spills were routinely discharged without treatment into constructed drainage ditches, where they flowed into Jackson Creek and Grant Creek. Unlined piles of incinerator ash and a leak in the liner of one of several wastewater lagoons have also contributed to contamination of groundwater and surface water. Approximately 1,155 people live within 3 miles of the site. The nearest residence is less than 1/2 mile away, and there are water supply wells in use within 1 mile of the site. About 2,500 acres on the site are used for commercial agriculture. An active land-leasing program exists, with more than 80 agricultural and cattle grazing leases being exercised.

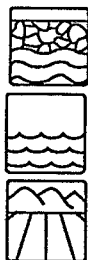
**Site Responsibility:** This site is being addressed through Federal actions.

### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 07/21/87

## Threats and Contaminants



Groundwater, is contaminated with trinitrotoluene (TNT) and related organic compounds. *Sediments* and surface water contain TNT, lead, arsenic, and chromium. Potential health threats include touching or accidentally ingesting contaminated groundwater, soil, surface water or sediments. In addition, contaminants may potentially accumulate in fish, waterfowl, livestock, and commercial agricultural products and could pose a health threat to those who eat them.

## 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 1985, over 7 million gallons of explosive-contaminated water was removed from the Red Water Lagoon and transported to a federally approved facility for disposal. Explosive-contaminated *sludge* and the lagoon liner were also removed, and the area was covered with clay. In addition, two piles containing ash from past incineration of explosives were *re-capped*.



**Entire Site:** In 1989, the Army began investigating the type and extent of the contamination at the plant. The investigation is scheduled for completion in 1993. Effective measures will then be recommended for site cleanup based on the results of the studies.

**Site Facts:** An *Interagency Agreement* was signed between the Army and the EPA in June 1989. Under this agreement, the Army will investigate and clean up the contamination on the site. The site is participating in the *Installation Restoration Program* (IRP), a specially funded program developed in 1978 by the Department of Defense (DOD) to identify, control, and investigate hazardous wastes on military or other DOD installations.

## Environmental Progress



Removing the wastewater and sludge, covering, and capping the area have greatly reduced the threat of exposure to or spread of hazardous materials. The Army is conducting investigations that will lead to the selection of final cleanup actions for the Joliet Army Ammunition Plant (Manufacturing Area) site.



# KERR-MCGEE (KRESS CREEK/WEST BRANCH OF DUPAGE RIVER)

ILLINOIS

EPA ID# IL980823991



**REGION 5**  
CONGRESSIONAL DIST. 14  
DuPage County  
West Chicago

**Alias:**  
West Branch of DuPage River

## Site Description

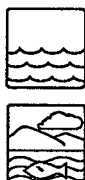
The Kerr-McGee (Kress Creek/West Branch of DuPage River) site covers about 1 1/2 miles of Kress Creek and 1/2 mile of the West Branch of the DuPage River in West Chicago. In 1931, the Lindsay Light and Chemical Company established a mill in West Chicago for extracting thorium and non-radioactive elements from monazite and other ores. Later, the mill was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash and Chemical in 1958 and to Kerr-McGee Chemical Corporation in 1967. The primary activity at Kerr-McGee was the processing of ores containing thorium, radium, uranium, rare earths, and heavy metals such as lead. The waste materials from these operations were sent to numerous areas within the City of West Chicago. The main sites include: the Kress Creek and West Branch area, which receives *runoff* from the Rare Earth Facility; the City sewage treatment plant; Reed-Keppler Park, a public park; and 117 additional properties. Operations continued at the site until Kerr-McGee closed the plant in 1973. Over the years, a portion of the wastes from the plant were discharged into Kress Creek, a tributary of the DuPage River, either by storm sewer or drainage ditch. Radiation contamination, which is found to a depth of several feet along the stream, decreases with distance from the creek. Many of the highest levels of contamination were found near the storm sewer *outfall*. Kerr-McGee Reed Keppler Park, Kerr-McGee Residential Areas, and Kerr-McGee Sewage Treatment Plant are listed as separate sites on the National Priorities List. Approximately 20,000 people live within 3 miles of the site. Drinking water in the area is obtained by municipal or private wells.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

## Threats and Contaminants



*Sediments* and Kress Creek contain radiation. People who touch or accidentally ingest the contaminated water in Kress Creek may suffer adverse health effects. In addition, wildlife in and around the creek may be harmed by the radiation.

## Cleanup Approach

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

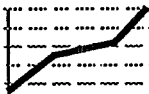
## Response Action Status



**Entire Site:** In 1983, Kerr-McGee began an investigation of the Kress Creek area. The first phase of the investigation is completed. The entire investigation is scheduled for completion in 1991, at which time cleanup alternatives for the site will be recommended.

**Site Facts:** In 1984, the U.S. Nuclear Regulatory Commission (NRC) issued an Order to Show Cause, requiring Kerr-McGee Chemical Corporation to either prepare and implement a cleanup plan, or show just cause why it should not be required to do so. In 1985, Kerr-McGee and the City of West Chicago entered into a *Consent Decree* to excavate, remove contaminants, and decontaminate the sites.

## Environmental Progress



After listing the Kerr-McGee (Kress Creek/West Branch of DuPage River) site on the NPL, the EPA performed preliminary evaluations and determined that the site does not pose an immediate threat to the public or the environment while the investigations leading to a permanent cleanup remedy for this site and the three associated Kerr-McGee sites are taking place.

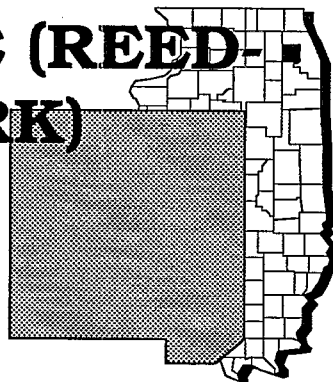




# KERR-MCGEE (REED-KEPPLER PARK)

ILLINOIS

EPA ID# ILD980824007



**REGION 5**  
CONGRESSIONAL DIST. 14  
DuPage County  
West Chicago

## Site Description

The Kerr-McGee (Reed-Keppler Park) site covers about 11 acres in West Chicago. In 1931, the Lindsay Light and Chemical Company established a mill in West Chicago for extracting thorium and non-radioactive elements from monazite and other ores. Later, the mill was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash and Chemical in 1958 and to Kerr-McGee Chemical Corporation in 1967. The primary activity at Kerr-McGee was the processing of ores containing thorium, radium, uranium, rare earths, and heavy metals such as lead. The waste materials from these operations were dispersed among numerous areas within the City of West Chicago. The main sites include: the Kress Creek and West Branch area, which receives *runoff* from the Rare Earth Facility; the City sewage treatment plant; Reed-Keppler Park, a public park; and 117 additional properties. Operations continued at the site until Kerr-McGee closed the plant in 1973. Radioactive materials were *landfilled* at Reed-Keppler Park, which had originally been a gravel quarry. The contaminated areas are within the landfill and around and under the tennis courts adjacent to it. For additional information, please see the other National Priority Listings for Kerr-McGee; all are being treated as separate sites. Approximately 15,000 people live within 3 miles of the site. The closest residence to the park is about 250 feet away. There are several private wells 2,000 feet from the park.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

## Threats and Contaminants



The air and groundwater contain radiation. Soil contains heavy metals and radiation. People who touch or accidentally ingest contaminated groundwater and soil may be at risk.

## Cleanup Approach

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

### Response Action Status



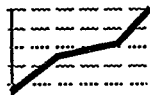
**Interim Actions:** In 1986, approximately 20,000 cubic yards of thorium mill tailings at the park were excavated and moved to a fenced area.



**Reed-Keppler Park:** In 1983, Kerr-McGee began an investigation of the Reed-Keppler Park area. The first phase of the investigation is finished. The entire investigation is scheduled for completion in 1991, at which time cleanup technologies will be recommended for the site.

**Site Facts:** In 1984, the U.S. Nuclear Regulatory Commission (NRC) issued an Order to Show Cause, requiring Kerr-McGee Chemical Corporation to either prepare and implement a cleanup plan, or to show just cause why it should not be required to do so. In 1985, Kerr-McGee and the City of West Chicago entered into a *Consent Decree* to excavate and to decontaminate the sites.

### Environmental Progress



The removal of mill tailings from the park has significantly reduced the potential for exposure to radioactive materials at the Kerr-McGee (Reed-Keppler Park) site, while investigations leading to final cleanup actions take place.



# KERR-MCGEE (RESIDENTIAL AREAS)

ILLINOIS

EPA ID# ILD980824015



**REGION 5**  
CONGRESSIONAL DIST. 14

DuPage County  
West Chicago

## Site Description

The Kerr-McGee (Residential Areas) site covers about 30 acres adjacent to the Kerr-McGee Chemical Corporation facility, as well as other adjacent areas and isolated spots of elevated radiation levels in West Chicago. In 1931, the Lindsay Light and Chemical Company established a mill in West Chicago for extracting thorium and non-radioactive elements from monazite and other ores. Later, the mill was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash and Chemical in 1958 and to Kerr-McGee Chemical Corporation in 1967. The primary activity at Kerr-McGee was the processing of ores containing thorium, radium, uranium, rare earths, and heavy metals such as lead. The waste materials from these operations were dispersed among numerous areas within the City of West Chicago. The main sites include: the Kress Creek and West Branch area, which receives runoff from the Rare Earth Facility; the City sewage treatment plant; Reed-Keppler Park, a public park; and 117 additional properties. Operations continued at the site until Kerr-McGee closed the plant in 1973. In 1978, the U.S. Nuclear Regulatory Commission located 75 spots of elevated radiation levels. Since that time, the number has grown to approximately 117. Although the general area of contamination may be due, in part, to long-term emissions from the facility, the primary source of contamination is believed to be the result of specific incidents such as spills or the use of contaminated material as fill. The Kerr-McGee (Reed Keppler Park), Kerr-McGee (Kress Creek/West Branch), and Kerr-McGee (Sewage Treatment Plant) sites are all being treated as separate sites on the National Priorities List. Approximately 15,000 people live within 3 miles of the site.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

## Threats and Contaminants



Soil is contaminated with radiation. People who are exposed to elevated levels of radiation in the soils may suffer adverse health effects.

## Cleanup Approach

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

### Response Action Status



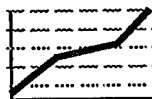
**Interim Actions:** Kerr-McGee has removed soils from residences and placed the material at a facility for temporary storage.



**Entire Site:** In 1983, Kerr-McGee began an investigation of the residential areas. The first phase of the investigation is finished, and the entire investigation is scheduled for completion in 1992. The final report will include recommendations for site cleanup measures, from which the EPA will select a final cleanup remedy.

**Site Facts:** In 1984, the U.S. Nuclear Regulatory Commission (NRC) issued an Order to Show Cause, requiring Kerr-McGee Chemical Corporation to either prepare and implement a cleanup plan, or to show just cause why it should not be required to do so. In 1985, Kerr-McGee and the City of West Chicago entered into a *Consent Decree* to excavate, remove contaminants, and decontaminate the sites.

### Environmental Progress



The removal of some of the contaminated soil from the Kerr-McGee (Residential Areas) site has helped to reduce the potential of exposure to hazardous materials while the investigations leading to the selection of the final cleanup remedies are taking place.



# KERR-MCGEE (SEWAGE TREATMENT PLANT)

ILLINOIS

EPA ID# ILD980824031



**REGION 5**  
CONGRESSIONAL DIST. 14  
DuPage County  
West Chicago

## Site Description

The Kerr-McGee (Sewage Treatment Plant) site covers about 23 acres in West Chicago. In 1931, the Lindsay Light and Chemical Company established a mill in West Chicago for extracting thorium and non-radioactive elements from monazite and other ores. Later, the mill was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash and Chemical in 1958 and to Kerr-McGee Chemical Corporation in 1967. The primary activity at Kerr-McGee was the processing of ores containing thorium, radium, uranium, rare earths, and heavy metals such as lead. The waste materials from these operations were sent to numerous areas within the City of West Chicago. The main sites include: the Kress Creek and West Branch area, which receives *runoff* from the Rare Earth Facility; the City sewage treatment plant; Reed-Keppler Park, a public park; and 117 additional properties. Operations continued at the site until Kerr-McGee closed the plant in 1973. The original sewage treatment plant was built in 1919 and included two septic tanks. Over the years, the tanks were filled with radioactive materials. Additionally, fill, including radioactive materials, was placed in other areas of the site. While modernizing the plant, the City has located many surface and subsurface areas of the contamination. For additional information, please see the listings for Kerr-McGee (Reed Keppler Park), Kerr-McGee (Residential Areas), and Kerr-McGee (Kress Creek/West Branch), all listed separately on the National Priorities List. Approximately 15,000 people live within 3 miles of the site. The surrounding area is low-density residential, with forests north of the plant. There are thorium *mill tailings* on the west bank of the DuPage River, and the closest residences are on the east side of the river. The closest house is about 300 feet from the tailings.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

## Threats and Contaminants



Groundwater contains radiation and heavy metals. Soil at the site contains radiation. People who are exposed to radioactive-contaminated groundwater and soil may suffer adverse health effects.

## 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



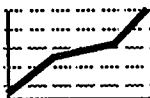
**Immediate Actions:** In 1986, Kerr-McGee removed soils from the sewage treatment plant and placed the material in a facility for temporary storage.



**Entire Site:** In 1983, Kerr-McGee began an investigation of the sewage treatment plant. Once the investigation is completed, scheduled for 1992, measures will be recommended for site cleanup. The EPA will then select the final cleanup remedy from these recommendations.

**Site Facts:** In 1984, the U.S. Nuclear Regulatory Commission (NRC) issued an Order to Show Cause, requiring Kerr-McGee Chemical Corporation to either prepare and implement a cleanup plan, or to show why it should not be required to do so. In 1985, Kerr-McGee and the City of West Chicago entered into a *Consent Decree* to excavate, remove contaminants, and decontaminate the site.

### Environmental Progress



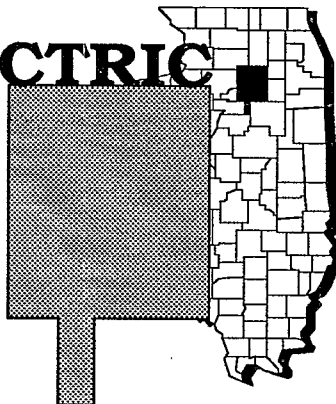
Removal of some of the contaminated soil from the Kerr-McGee (Sewage Treatment Plant) site has helped to reduce the potential for exposure to hazardous materials while the investigations leading to the selection of a permanent remedy for the site are taking place.



# LASALLE ELECTRIC UTILITIES

ILLINOIS

EPA ID# ILD980794333



**REGION 5**  
CONGRESSIONAL DIST. 14  
LaSalle County  
LaSalle

## Site Description

From the late 1940s to 1978, the 10-acre LaSalle Electric Utilities (LEU) site was used to manufacture capacitors containing *polychlorinated biphenyls* (PCBs). Operations ceased in 1981, and the site is now abandoned. The company reportedly used waste oil to control dust in the parking lot and off site until 1969. Several hundred drums of PCB wastes, many of which were leaking, were found stored in a wooden shed. A tank truck containing PCB-contaminated wastes was found near a storm drain manhole. Leakage from these containers may have reached the storm sewer system and surface water tributary to the Illinois River. An aboveground storage tank was also discovered that contained 940 gallons of *trichloroethylene* (TCE). Additionally, PCB-contaminated soil was stockpiled on site. PCBs have been found on the shoulder of the road that passes in front of the LEU site. This contaminated area covers approximately 1 1/2 miles and passes in front of a school and recreational park. Approximately 190 people reside within 1/8 of a mile of the site; 3,400 people live within 1 mile of the site and approximately 21,000 people live within 3 miles of the site.

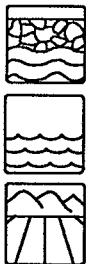
**Site Responsibility:** This site is being addressed through Federal and State actions.

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater, surface water, *sediments*, soil, and the buildings on site are contaminated with PCBs. The buildings are also contaminated with asbestos. Primary health threats include touching or accidentally ingesting contaminated groundwater, surface water, sediments, or soil. PCB leakage from the drums on site could reach the storm sewer system and tributaries of the Illinois River.

## Cleanup Approach

This site is being addressed in three stages: initial actions and two *long-term remedial phases* focusing on off-site soil cleanup and on-site soil, sediments, and groundwater cleanup

## Response Action Status



**Initial Actions:** Between 1982 and 1985, the EPA completed several activities in order to *stabilize* the contaminated areas including: (1) installing warning signs, a barbed wire fence, and a gate around the site; (2) *capping* the property; (3) constructing four on-site monitoring wells; (4) capping contaminated off-site areas; (5) staging, sampling, and packaging PCB waste materials for future disposal; and (6) draining 15 vertical tanks and 5 diffusion pump reservoirs inside the LaSalle Electric building into five drums. The drums containing PCB materials were moved to a diked and lined storage area inside the warehouse. A retention pond was expanded to control on-site drainage, stained soil was excavated from under the tank trailer, and the excavated soil was placed into drums. The tank containing TCE was also removed from the site for reuse.

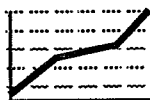


**Off-Site Soil:** Based on the results of the site investigations, the EPA selected the following remedies to clean up the site: (1) excavating approximately 23,550 cubic yards of contaminated off-site soil and replacing it with clean fill; (2) incinerating contaminated soils with a thermal destruction unit; and (3) implementing conventional industrial cleaning to include vacuuming, hand washing, steam jet cleaning, and absorption of all structures where soil removal activities have taken place. The State began cleanup activities in 1987 by excavating the contaminated off-site soil and replacing it with the clean fill. Following this action, buildings in the area were cleaned, and the ventilation systems were scrubbed. The remaining soil incineration and final work on the site cleanup are expected to be completed in 1990. As a safety measure to avoid the inhalation of possible airborne contaminated particulates by the residents, approximately 30 families and two businesses were relocated during excavations and until homes were cleaned up.



**On-Site Soil, Sediments, and Groundwater:** In 1988, a decision was reached by the State to perform the following cleanup actions: (1) excavating contaminated soil from the LaSalle Electric Utilities property; (2) high-pressure flushing and mechanical cleaning of contaminated sewer lines; (3) excavating contaminated sediment from the unnamed creek downstream of the storm sewer discharge; (4) incinerating the contaminated soil and sediment with a thermal destruction unit; (5) demolishing and disposing of the contaminated LEU buildings; (6) constructing a groundwater collection system on or near the LEU property; and (7) constructing an on-site treatment system that will process the collected contaminated groundwater. The design of the cleanup action is completed. Cleanup activities are scheduled to begin in 1990.

## Environmental Progress



Securing the site, containing contaminated soil through capping, and incinerating and excavating the PCB wastes have greatly reduced the potential for exposure to hazardous materials at the LaSalle Electric Utilities site while further cleanup activities are started.

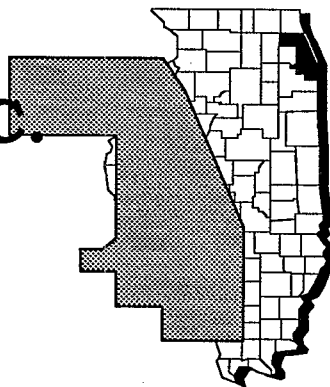




# LENZ OIL SERVICE, INC.

ILLINOIS

EPA ID# ILD005451711



**REGION 5**  
CONGRESSIONAL DIST. 04  
Cook County  
Lemont

## Site Description

Lenz Oil Service, Inc., operated an oil and solvent storage and transfer facility under different ownership for over 20 years. In 1980, Charles Russell purchased the company and began a waste management operation at the site. In 1981, the company received a permit from the Illinois Environmental Protection Agency (IEPA) to accept hazardous waste. In 1985, three surface *impoundments* were used to store hazardous waste. Also at the site were three underground unlined concrete storage tanks, 35 aboveground tanks, and 200 drums. In 1985, the Illinois Attorney General's Office required Lenz Oil and Charles Russell to begin an immediate cleanup and to file a *closure* and compliance plan. In 1986, Lenz Oil filed for bankruptcy. In 1986, the IEPA performed soil sampling at the site and found it to be contaminated with high levels of *volatile organic compounds* (VOCs). Private residential wells adjacent to the site show contamination, but residents of these homes have been connected to alternate water supplies. Approximately 11,300 people live within 3 miles of the site.

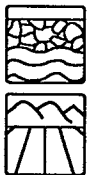
**Site Responsibility:** This site is being addressed through Federal and *potentially responsible parties'* actions.

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

## Threats and Contaminants



Groundwater and soils are contaminated with various VOCs. Private wells adjacent to the site are contaminated. Drinking contaminated groundwater may pose a potential health threat. Direct contact with VOC-contaminated soils may also be a potential health threat.

## 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

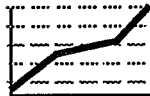


**Immediate Actions:** In 1986, the State provided an alternate water supply to residents with contaminated wells. The State subsequently performed surface soil cleanup activities, which included the incineration of 21,000 tons of contaminated soil in 1989.



**Entire Site:** A group of 199 potentially responsible parties agreed to perform a study to determine the nature and extent of contamination at the site. The study began in 1989. Based on the results of the investigations, various cleanup alternatives will be recommended, from which the EPA will select the final remedy.

### Environmental Progress



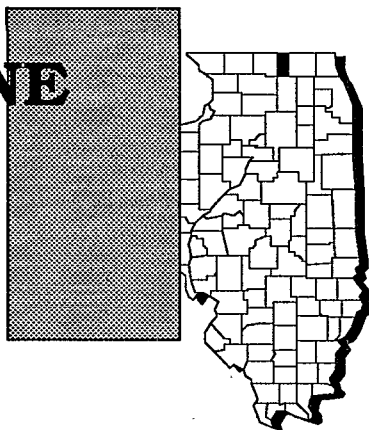
The incineration of contaminated soil and the provision of an alternate water supply have greatly reduced the potential for exposure at the Lenz Oil Service site while further investigations are taking place and cleanup activities are planned.



# MIG/DEWANE LANDFILL

ILLINOIS

EPA ID# ILD980497788



**REGION 5**  
CONGRESSIONAL DIST. 16  
Boone County  
Belvidere

**Aliases:**  
**Mig Investment**  
**Bonus Landfill**

## Site Description

The 50-acre MIG/Dewane Landfill site began accepting household refuse and special wastes such as paint *sludges* and organic solvents in the early 1980s. Reportedly, 480,000 gallons of hazardous wastes were dumped into the *landfill*. The landfill is not covered, and *leachate* has been observed moving off site. The site ceased operations in 1988 when the State sued the landfill owner for exceeding its permit authority. Approximately 10 acres of the site contain exposed wastes. The State pumps out a leachate collection *lagoon* periodically to keep it from overflowing. There are approximately 16,300 people who obtain drinking water from wells within 3 miles of the site. The site is located near Belvidere's municipal water wells and private wells. One municipal well and 28% of the private wells are obtaining water from the upper *aquifer*. A private well is 2,500 feet from a contaminated well on the site. The site is located about 2,000 feet from the Kishwaukee River.

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

### NPL LISTING HISTORY

Proposed Date: 10/26/89

## Threats and Contaminants



*Volatile organic compounds* (VOCs) have been detected in groundwater downslope of the site. Heavy metals including arsenic, cyanide, lead, and zinc have been detected in leachate samples. Potential health threats to people include drinking and touching contaminated groundwater and leachate.

## Cleanup Approach

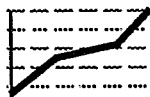
This site is being addressed in a single *long-term remedial phase* focusing on cleanup of the entire site.

## Response Action Status



**Entire Site:** Because the MIG/Dewane Landfill site was recently proposed to the NPL, no cleanup activity has commenced. A thorough investigation will be conducted to determine the nature and extent of the contamination at the site.

## Environmental Progress



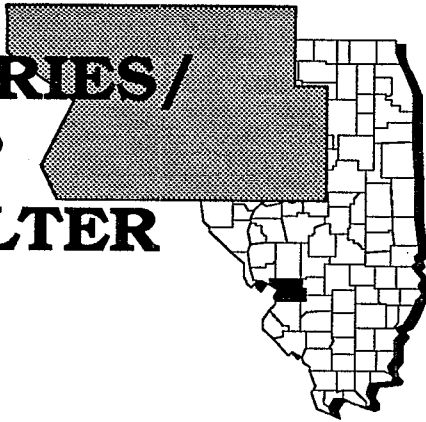
At the time that this summary was written, this site had just obtained NPL status, and it was too early to discuss environmental progress. The EPA will be performing a study to assess the need for any intermediate actions required to make the site safer while waiting for cleanup actions to begin.



# NL INDUSTRIES/ TARACORP LEAD SMELTER

ILLINOIS

EPA ID# ILD096731468



**REGION 5**  
CONGRESSIONAL DIST. 21

Madison County  
Granite City

**Aliases:**  
**Hoyt Plant**  
**National Lead Taracorp**  
**Taracorp Industries Granite City Plant**  
**Granite City Lead**

## Site Description

Operations at the 16-acre NL Industries/Taracorp Lead Smelter site have included metal refining, fabricating, and related activities since the turn of the century. Taracorp Inc. purchased the facility in 1979 from NL Industries, owners since 1928, and currently operates it as a metal fabrication facility. Lead pollution in the area is believed to be partially a result of lead smelting conducted at the site from 1905 until 1983. The smelter was used for purifying and reprocessing lead-containing scrap, used batteries, and cable sheathing. Solid wastes generated from this process included blast furnace slag, battery cases, and dust from the smelter's smoke stack. These wastes were stored on site in waste piles. Another storage area of waste piles is located at the St. Louis Lead Recyclers (SLLR) site, adjacent to the Taracorp Inc. property. The wastes at SLLR were a result of recycling the original waste piles. A third location of contamination attributed to the site is the remote fill areas of Venice and Eagle Park Acres, where lead-containing battery case pieces were allegedly used for fill and alley paving material. The Illinois Environmental Protection Agency (IEPA) began monitoring air quality for lead in 1978. Between 1978 and 1981, air monitoring detected levels exceeding Federal standards. In 1981, the State of Illinois was required by the EPA to develop a plan to control and maintain Federal air quality standards for lead in Granite City. In 1982, the State of Illinois denied an application for renewal of Taracorp's permit to operate the smelter since the primary source of lead pollution detected in area air and soil was from the Taracorp facility. Taracorp, Inc. filed for bankruptcy in 1982. Approximately 15,000 people live within 1 mile of the site, which is located within a heavily industrialized section of Granite City.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 06/10/86

## Threats and Contaminants



Groundwater in monitoring wells was found to be contaminated with dissolved solids, sulfates, and manganese. Two on-site wells also contained heavy metals including arsenic, cadmium, nickel, manganese, and zinc. *Sediments* samples from the stormwater *runoff* areas and soils contained elevated levels of lead. Granite City's municipal drinking water comes from the Mississippi River and does not appear to be affected by contaminated groundwater. Potential health risks may exist from touching or accidentally ingesting contaminated soils.

## 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 EPA selected a remedy to clean up the site which includes: (1) removing crushed hard rubber battery casings and lead-contaminated soil from residential areas; (2) excavating and consolidating the soils, crushed casings, and lead-contaminated materials from an adjacent waste pile into the existing Taracorp slag pile; (3) covering the Taracorp pile with a *cap*; (4) installing an upgraded security fence around the the Taracorp pile; (5) implementing deed restrictions and other institutional controls; (6) inspecting alleys and driveways and areas containing surficial battery case material to determine if they must also be cleaned; (7) installing monitoring wells; (8) monitoring groundwater, air, and the cap; (9) removing and recovering all drums on the Taracorp pile at a secondary smelter; and (10) consolidating the waste contained in the adjacent St. Louis Lead Recyclers piles with the Taracorp pile.

**Site Facts:** In 1985, the EPA and the State signed a *Consent Order* with NL Industries requiring the company to conduct an investigation to determine the type and extent of contamination at the site and to identify alternatives for cleanup. The EPA has sent *Special Notice Letters* to the potentially responsible parties. Once an agreement is negotiated, the design of the remedy and the cleanup activities will begin.

## Environmental Progress



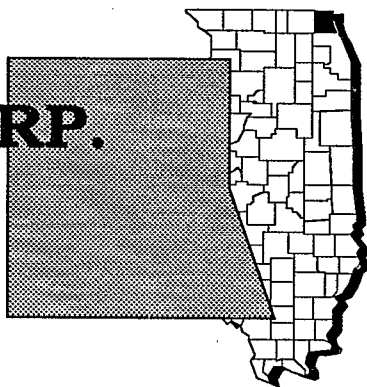
After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the NL Industries site while further studies and cleanup activities are taking place.



# OUTBOARD MARINE CORP.

ILLINOIS

EPA ID# ILD000802827



**REGION 5**  
**CONGRESSIONAL DIST. 10**  
Lake County  
Waukegan

## Site Description

The Outboard Marine Corp. (OMC) site covers three separate areas: Waukegan Harbor, a 37-acre area along the western shore of Lake Michigan; North Ditch, a small tributary approximately 1,500 feet north of the Harbor; and the OMC parking lot, a 9-acre lot south of North Ditch. Between 1959 and 1971, the Johnson Motors Division of OMC purchased hydraulic fluids containing *polychlorinated biphenyls* (PCBs). The company used the material in aluminum die cast machines that routinely leaked. In 1976, it was discovered that the company was discharging PCBs into Waukegan Harbor and the North Ditch. Both of these water bodies flow into Lake Michigan. The City of Waukegan has a population of approximately 68,000 and surrounds Waukegan Harbor. The harbor area is primarily zoned for industrial and commercial use. There are approximately 15 businesses in the immediate harbor area and a worker population of about 3,500 people. People in the area also use the harbor for various recreational activities.

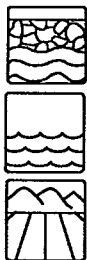
**Site Responsibility:** This site is being addressed through Federal and *potentially responsible parties'* actions.

### NPL LISTING HISTORY

Proposed Date: 10/22/81

Final Date: 09/08/83

## Threats and Contaminants



Groundwater, surface water, *sediments*, and soils are contaminated with PCBs. The primary way people could be exposed to hazardous chemicals from the site is to eat fish contaminated with PCBs. Other potential health hazards include touching or accidentally ingesting contaminated materials.

## Cleanup Approach

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

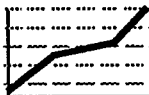
## Response Action Status



**Entire Site:** In 1989, the EPA selected a remedy to clean up the site including: (1) constructing a cutoff and *slurry wall* in a boat slip in the harbor to form a *cell* to contain the contaminants; (2) constructing a new boat slip and relocating Larsen Marine; (3) removing and treating sediments in the boat slip and placing contaminated sediments in the *containment cell* of the new slip; (4) excavating and treating soil and sediments on site from the *lagoon* area; (5) constructing a containment cell to treat residues and PCB-contaminated soils with lower levels of contamination; (6) constructing a containment cell around the parking lot area; (7) constructing a temporary facility on site to treat waste dredged from the containment cells; (8) constructing a permanent facility on site to treat contaminated water; (9) treating water from the containment cell on site by discharging the water to a facility that can treat the water; (10) placing a *cap* on all containment cells; and (11) monitoring the groundwater. The potentially responsible parties are designing the technical specifications for the cleanup under EPA monitoring. Construction is expected to begin in 1990.

**Site Facts:** In 1984, the EPA began design work to clean up soils and sediments contaminated with PCBs. A *Consent Decree* was signed in 1986 by OMC. The potentially responsible parties and the EPA entered into a Consent Decree in 1989, requiring the parties to perform the cleanup activities on the site.

## Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Outboard Marine Corp. site while final cleanup activities are being designed and planned.

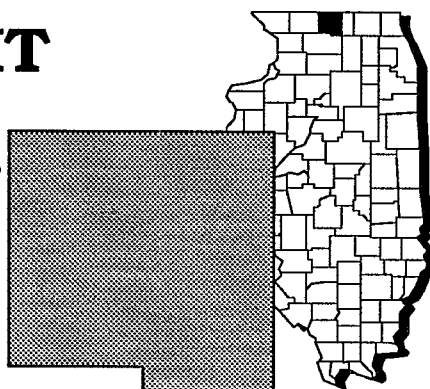




# PAGEL'S PIT

## ILLINOIS

EPA ID# ILD980606685



**REGION 5**  
CONGRESSIONAL DIST. 16  
Winnebago County  
Rockford

### Site Description

The 60-acre Pagel's Pit site is a *landfill* that has been operated by Winnebago Reclamation since 1972. The pit is lined with "blacktop," which has a coal tar sealer. The landfill accepted municipal refuse, sewage *sludge*, and a limited amount of other wastes. The landfill is still operating. Access to the site is somewhat restricted. Approximately 170 people live within a 1-mile radius of the site, and the nearest residence is across the street from the site. The shallow *aquifer* under the site is a source of drinking water to residents in the area. The Winnebago County Health Department tested the water and discovered it was contaminated with several *volatile organic compounds* (VOCs). Some residents have home *carbon treatment* units for their water supply due to the Acme Solvent contamination, another NPL site. This site is located approximately 1,500 feet east of Pagel's Pit. Killbuck Creek is located on the eastern perimeter of the site. Pagel's Pit is located in a rural area.

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

#### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 06/10/86

### Threats and Contaminants



Shallow groundwater under the site contains VOCs, phthalates, and arsenic. People may potentially be exposed to hazardous chemicals from the site by touching or swallowing contaminated groundwater. The shallow aquifer under the site may be contaminated with several VOCs. Killbuck Creek could become contaminated through *runoff* from the site.

## Cleanup Approach

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

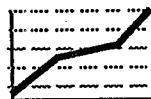
## Response Action Status



**Entire Site:** In 1986, the EPA began a study of contamination at the site, but the potentially responsible parties have taken it over. The parties are examining the type of contaminants at the site and how far they have spread. This study will also identify alternatives for addressing the problem and is expected to be completed in 1992.

**Site Facts:** In 1986, the EPA negotiated a settlement with the potentially responsible parties to study the nature and extent of the problem and to examine alternative solutions.

## Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Pagel's Pit site while further studies are taking place and cleanup activities are being planned.



# PARSON'S CASKET HARDWARE CO.

ILLINOIS

EPA ID# ILD005252432



**REGION 5**  
CONGRESSIONAL DIST. 16

Boone County  
Belvidere

Alias:  
Parson's Casket

## Site Description

The 2-acre Parson's Casket Hardware Co. site was used as an electroplating facility from 1898 until 1982, when the owner filed for bankruptcy. Wastes from the operations were stored in drums, aboveground and underground storage tanks, and an unlined surface *impoundment*. Wastes generated included electroplating *sludge*; cyanide plating and cleaning solutions; and bronze, nickel, and brass sludges. In 1982, the State found that approximately 120 drums of various sizes were stored inside and outside the manufacturing building; many were dented, corroded, leaking, or uncovered. Approximately 4,800 gallons of wastes were stored in aboveground and underground tanks. An unlined *lagoon* contained approximately 166,500 gallons of liquid wastes and 1,230 cubic yards of sludges. Post-cleanup sampling data was collected by the State in 1987 and indicated that the groundwater is contaminated with *volatile organic compounds* (VOCs). The municipal water system in the area uses groundwater from an *aquifer* that the site may be contaminating. Approximately 6,000 people live within a 1-mile radius of the site. The closest residence is less than 1/10 of a mile away. Municipal water supply wells are within 3 miles of the site and are the sole source of drinking water for Belvidere's 15,200 residents. Area residents use the Kishwaukee River, 1,400 feet from the site, for fishing and recreational activities.

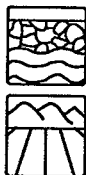
**Site Responsibility:** This site is being addressed through Federal and State actions.

### NPL LISTING HISTORY

Proposed Date: 12/30/86

Final Date: 07/21/87

## Threats and Contaminants



Groundwater contains various VOCs. Soils on site contain heavy metals including arsenic, copper, and nickel. People who use the local municipal water supply system may be exposed to hazardous chemicals from the site.

## 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



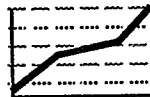
**Initial Actions:** In 1984, the State of Illinois began to clean up the surface impoundment and the storage tanks on site and completed the action in 1985. Also in 1985, Filter Systems, Inc. purchased the building and moved all drums inside the building.



**Entire Site:** The State is carrying out a study of the nature and extent of contamination at the site, under EPA monitoring. The EPA will use the results of this study to select alternative actions for the cleanup of the site.

**Site Facts:** The State ordered the Parson's Casket Hardware Co. to repackage all leaking drums and move them indoors before it filed for bankruptcy. The new owner, Filter Systems, Inc., agreed to recycle or remove the drums stored in the building on site.

### Environmental Progress



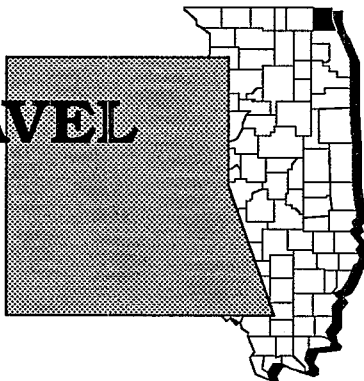
The cleanup of the surface impoundment and storage tanks has greatly reduced the potential for exposure to hazardous materials at the Parson's Casket Hardware Co. site while further studies are taking place and cleanup activities are being planned.



# PETERSEN SAND & GRAVEL

ILLINOIS

EPA ID# ILD003817137



**REGION 5**  
CONGRESSIONAL DIST. 10  
Lake County  
1 mile north of Libertyville

## Site Description

The 120-acre Petersen Sand & Gravel site is a quarry purchased by Raymond Petersen in 1952 to mine sand and gravel. The company dumped non-hazardous wastes, solvents, and paint wastes in buried drums at the site between 1955 and 1958. Raymond Petersen owned the site until the Lake County Forest Preserve District (LCFPD) acquired it in 1979. The District planned to convert the quarry into a 240-acre recreational lake. The Illinois Environmental Protection Agency (IEPA) inspected the site in 1971 and ordered it closed because of illegal dumping. The site consists of three disposal areas that are located in the quarry and just east of the Des Plaines River. The first disposal area, which the IEPA reinspected in 1972 and found to be properly closed, contains non-hazardous wastes. In 1976, the IEPA discovered 10 to 15 uncovered barrels of waste in the second disposal area of the gravel pit. Of these, about half contained paint and solvent wastes. In 1983, the LCFPD uncovered six more drums containing unknown liquids in an area of the site located outside the quarry, 100 yards east of the second disposal area. Barbed wire surrounds the perimeter of the gravel pit. Approximately 880 people live within a 1-mile radius of the site. The closest residence is an on-site trailer.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 06/10/86

## Threats and Contaminants



Groundwater, surface water, and *sediments* contain *volatile organic compounds* (VOCs); heavy metals including arsenic, cadmium, chromium, and lead; *polychlorinated biphenyls* (PCBs); and *polycyclic aromatic hydrocarbons* (PAHs). Because contamination levels are low and site contaminants are not *migrating*, no potential health threats currently exist.



## 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



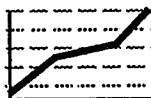
**Initial Actions:** In 1977, the IEPA removed approximately 350 drums from the second disposal area and placed them in a *landfill* permitted for hazardous waste. In 1983, approximately 400 empty drums, 2,600 yards of contaminated soil, and 26,000 gallons of surface water from a disposal trench were removed and placed in a permitted landfill for hazardous waste. Also, 750 drums and 1,000 paint cans were removed.



**Entire Site:** The State completed the final study of the site in 1988. The findings show that contaminants at the site do not exist at levels that present a concern to the health of residents in the area. Therefore, the EPA has concluded that no further site contamination studies or other cleanup actions will be carried out at the site, since the findings in the final report show that past removal actions were adequate and that no unacceptable risks remain. However, LCFPD plans to build a lake at the site which could change the way any contaminants remaining at the site migrate. Therefore, the LCFPD will monitor the surface water and sediments on site before and after the lake is built. Groundwater and rainwater that collect in the quarry pit will continue to be discharged to the Des Plaines River in compliance with the EPA's regulations for surface water until mining at the site stops.

**Site Facts:** The EPA and the IEPA conducted the study to determine the nature and extent of contamination at the site under a *Cooperative Agreement* signed in 1986.

## Environmental Progress



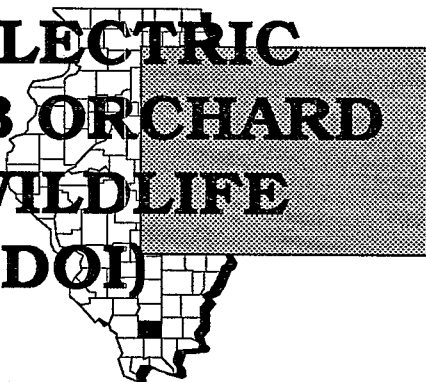
Studies performed at the Petersen Sand & Gravel site have shown that no threats currently exist for nearby residents and the environment. However, the State and the EPA will continue to monitor site conditions while a recreational lake is being constructed at the site, ensuring the continued safety for people using or living near the site.



# SANGAMO ELECTRIC DUMP/CRAB ORCHARD NATIONAL WILDLIFE REFUGE (USDO)

ILLINOIS

EPA ID# IL8143609487



**REGION 5**  
CONGRESSIONAL DIST. 22  
Williamson County  
Marion

**Aliases:**  
Olin Corp Ordill I Area  
Olin Corp Ordill Area 12  
Olin Corp Ordill D Area  
Olin Corp Ordill Ogden Road  
Olin Corp Ordill Fire Station  
Ordill Water Tower

## Site Description

The 42,000-acre Crab Orchard National Wildlife Refuge is owned by the U.S. Government. It is currently operated by the U.S. Fish and Wildlife Service (FWS) of the U.S. Department of the Interior (DOI). Manufacturing facilities have been operated on the Refuge for more than 45 years. Explosives, munitions, electrical equipment containing *polychlorinated biphenyls* (PCBs), boats, corrugated boxes, and plated metal parts are among the products that have been manufactured on the Refuge. During the early 1940s, several defense-related operations began along the eastern portion of Crab Orchard Lake. In 1946, the War Department transferred the land to DOI, and other companies moved onto the Refuge to use buildings formerly used by wartime manufactures. These small industries disposed of waste at several locations in the area. In 1984, potential contamination problems were brought to the attention of the EPA. The FWS, with the support of the EPA, has been investigating to determine the types and amounts of contaminants, as well as the extent of risks to public health and the environment. Based on initial field investigations and risk assessments, 31 subsites were studied and grouped into four areas: three subsites contaminated primarily with heavy metals; four subsites contaminated with PCBs and lead; four subsites associated with munitions or explosives manufacturing, which will be investigated by the Department of Defense (DOD); and the remaining subsite which will require additional investigations. Crab Orchard Lake is used as a drinking water source for Refuge personnel, visitors, the nearby Marion Federal Penitentiary, and industrial tenants. The lake also is used for various recreational activities, and has been used in the past as an auxiliary source of water for the Marion Reservoir, a nearby public water supply.

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

### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 03/31/89

## Threats and Contaminants



Groundwater contaminants include chromium, lead, arsenic, cadmium, PCBs, and various *volatile organic compounds* (VOCs). *Sediments* and soils are contaminated with PCBs and various heavy metals. Fish have been contaminated with PCBs. Eating contaminated fish may pose a health threat to people. Accidental ingestion of contaminated soil or sediments may also pose a health threat.

## Cleanup Approach

This site is being addressed in four *long-term remedial phases* focusing on cleanup of the (1) Metals Areas, (2) PCB Areas, (3) Munitions/Explosives Manufacturing Area, and (4) Miscellaneous Areas.

### Response Action Status



**Metals Areas:** In 1990, the EPA selected a remedy which includes: (1) excavating contaminated soil and sediment; (2) treating the hazardous materials by *stabilization* and fixation; (3) disposing of the residuals in an on-site solid waste *landfill*; (4) monitoring and maintenance of the area; and (5) implementing land use restrictions. The design of the technical specifications are under way and are expected to continue until 1991.



**PCB Areas:** An investigation into the source and extent of the PCB-contaminated subsites is under way. The method for cleaning up these subsites is scheduled to be selected in 1990.

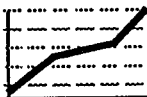


**Munitions/Explosives Manufacturing Area:** In 1990, the DOD is scheduled to begin an investigation of those areas contaminated with chemicals from munitions and explosives manufacturing. The investigation is expected to be concluded in 1993 with recommendations for cleanup activities.



**Miscellaneous Areas:** In 1991, the FWS is scheduled to continue an investigation into the remaining areas of the Refuge to identify any additional contaminated areas and to outline actions to be taken. This study is scheduled to be finished in 1994.

## Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Sangamo Electric Dump/Crab Orchard National Wildlife Refuge site while cleanup activities are being planned.





# SAVANNA ARMY DEPOT ACTIVITY

ILLINOIS

EPA ID# IL3210020803



**REGION 5**  
CONGRESSIONAL DIST. 16  
Carroll County  
North of Savanna

## Site Description

The 13,062-acre Savanna Army Depot site is an Army munitions installation located on the east bank of the Mississippi River. The facility has handled, processed, and stored munitions, explosives, and industrial chemicals since operations began in 1918. Renovation and loading of artillery shells and bombs began at the site in the 1930s and has occurred intermittently. Several areas of the facility have been used for the demolition and burning of obsolete ordnance. Approximately 70 areas within the facility have been identified as potential sources of hazardous waste. Public access to the site is restricted. There are approximately 650 people within 3 miles of the site and a large wintering population of Bald Eagles on the facility.

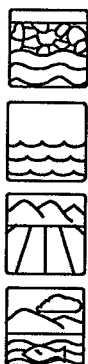
**Site Responsibility:** This site is being addressed through Federal actions.

### NPL LISTING HISTORY

Proposed Date: 10/15/84

Final Date: 03/31/89

## Threats and Contaminants



Groundwater is contaminated with various explosives, *trichloroethylene* (TCE), chloroform, and nickel. *Sediments* and surface water are contaminated with various explosives. Soil is contaminated with explosives and *polycyclic aromatic hydrocarbons* (PAHs). Potential health threats to people include drinking contaminated groundwater and touching surface water, soil and sediments.

## Cleanup Approach

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

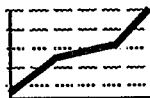
### Response Action Status



**Entire Site:** The U.S. Army, under EPA monitoring, currently is conducting an investigation into the nature and extent of the contamination at the site. The investigation will define the contaminants and recommend alternatives for the final cleanup. The investigation is planned to be completed in 1992.

**Site Facts:** In 1989, the EPA, the State, and the U. S. Army signed an *Interagency Agreement* regarding further cleanup activities at the site. The Savanna Army Depot Activity site is participating in the *Installation Restoration Program* (IRP), a federally funded DOD program to identify, investigate, and control hazardous waste on military installations.

### Environmental Progress



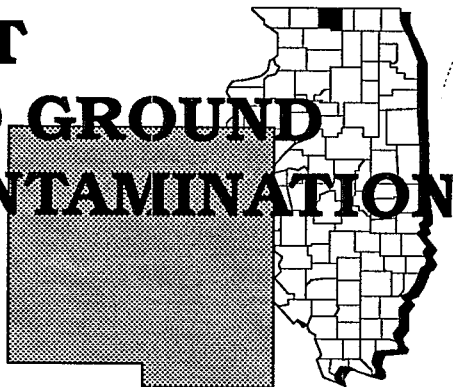
After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Savanna Army Depot site while the Army continues its investigations leading to final cleanup activities.



# SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION

ILLINOIS

EPA ID# ILD981000417



**REGION 5**  
**CONGRESSIONAL DIST. 16**

Winnebago County  
Rockford

**Alias:**  
**Southeast Rockford Dry Well**

## Site Description

The 2-square-mile Southeast Rockford site covers 83 city blocks; however, contamination could affect a larger area since these boundaries only indicate where the EPA has performed sampling. Conversely, the boundaries do not indicate that all homes or businesses within this area are affected by groundwater contamination. The groundwater at the site is contaminated with *volatile organic compounds* (VOCs). The Rock River is located 2 miles west of the site, but is not used as a drinking water supply. Some homes and businesses located within the site boundaries are already connected to the municipal water supply and are not affected by the groundwater contamination. Approximately 155,000 people living within 3 miles of the site use groundwater for drinking purposes. The majority of the people use City water, which is drawn from a protected *aquifer*.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/31/89

## Threats and Contaminants



On-site groundwater is contaminated with various VOCs. Potential health threats to people include drinking or touching contaminated groundwater.

## Cleanup Approach

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

### Response Action Status

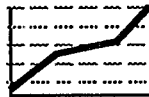


**Initial Actions:** In 1989, the EPA sampled the wells of 78 homes and tested the samples for specific VOCs. The EPA then offered bottled water as a temporary measure to residents of homes and apartments whose water wells were found to contain contaminants exceeding a certain level. Bottled water has also been offered to residents near the contaminated wells. The EPA is laying water mains, and approximately 200 homes will be connected to the City water supply. The EPA will install carbon filtration systems and undertake additional sampling.



**Groundwater:** The State, under EPA monitoring, is conducting an investigation into the source, nature, and extent of groundwater contamination at the site. The investigation will define the contaminants and recommend alternatives for the final groundwater cleanup. The investigation is planned to be completed in 1992.

### Environmental Progress



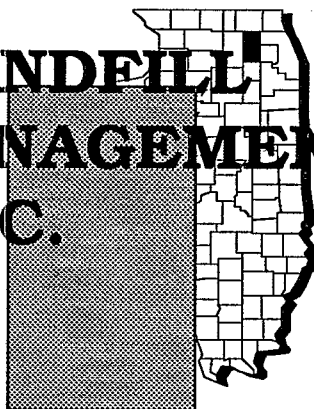
The provision of alternate water supplies has eliminated the potential of exposure to hazardous substances in the drinking water and will continue to protect residents near the Southeast Rockford site until planned cleanup activities are completed.



# TRI-COUNTY LANDFILL CO./WASTE MANAGEMENT OF ILLINOIS, INC.

ILLINOIS

EPA ID# ILD048306138



**REGION 5**  
CONGRESSIONAL DIST. 13

Kane County  
South Elgin

Alias:  
Tri County Landfill

## Site Description

The 46-acre Tri-County Landfill Co./Waste Management of Illinois, Inc. site was previously part of a gravel mining operation. The *landfill* site was originally owned and operated by the Tri-County Landfill Company from 1968 to 1973. The company had a permit from the State to accept general municipal refuse. Waste Management of Illinois, Inc. operated the site from 1973 until it was closed in 1977. In 1984, the EPA detected contaminants in monitoring wells *downgradient* of the site. The Fox River, approximately 1 mile west of the site, is used extensively for fishing and boating. A freshwater *wetland* is 1,100 feet away from the site. Over 10,000 people use wells within 3 miles of the site for drinking water, and a residential well is 1,800 feet away from the site. The nearest residence is located 1/2 mile from the site.

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

### NPL LISTING HISTORY

Proposed Date: 06/10/86

Final Date: 03/31/89

## Threats and Contaminants



The groundwater is contaminated with various *volatile organic compounds* (VOCs) as well as cyanide. The contaminated groundwater could pose a health hazard to individuals if it is accidentally touched or swallowed. The contaminants from the site could affect the adjoining wetlands. There are drainage ditches and tributaries that enter the Fox River. This surface water resource is used for various recreational activities. *Leachate* from the site has reportedly entered nearby ponds and ditches.

## 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 conducting an investigation of the site to determine the nature and the extent of the contamination. The investigation is scheduled to be completed in 1991, and the results of the investigation will be used to evaluate various cleanup alternatives and to select a preferred cleanup option.

## Environmental Progress



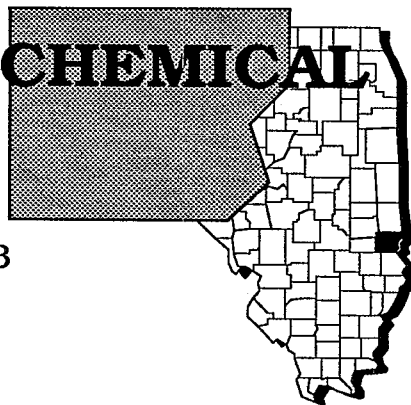
After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Tri-County Landfill Co./Waste Management of Illinois, Inc. site while cleanup activities are being planned.



# VELSICOL CHEMICAL (ILLINOIS)

ILLINOIS

EPA ID# ILD000814673



**REGION 5**  
CONGRESSIONAL DIST. 19

Clark County  
1 mile north of Marshall

**Alias:**  
**Marshall Plant**

## Site Description

The Velsicol Chemical (Illinois) site is a manufacturing facility that was in operation between the mid-1930s and 1987 and occupied an area of approximately 420 acres, 172 of which were used for production or disposal of petroleum resins, solvents, and pesticides. Production of chlordane began in the mid-1940s, with manufacturing operations at the facility remaining virtually unchanged until 1979, when Velsicol withdrew from the resin market. Manufacturing of chlordane was the sole product at the facility from 1980 to 1987. Hazardous wastes generated from various manufacturing activities were stored in on-site *impoundments*. Overflow from these impoundments resulted in releases of these wastes to a tributary of East Mill Creek. All the ponds that were previously used for waste storage are now only used to hold stormwater and plant *runoff*. There are approximately 40 residences located within 1/4 mile of the site. The population of Marshall, 1 mile from the site, is approximately 17,000.

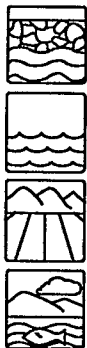
**Site Responsibility:** This site is being addressed through Federal and *potentially responsible parties'* actions.

### NPL LISTING HISTORY

Proposed Date: 12/30/82

Final Date: 09/08/83

## Threats and Contaminants



Groundwater was contaminated with various *volatile organic compounds* (VOCs) and pesticides. *Sediments* and on-site soils were contaminated with VOCs, pesticides, and cadmium. Elevated concentrations of pesticides were detected in fish. Adverse health effects may exist for people who eat contaminated fish, or accidentally ingest or touch contaminated soil, sediments, or 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



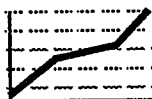
**Immediate Actions:** In the 1980s, all contaminated soil and sediments were consolidated and *stabilized* with cement and *fly ash* and then covered with a temporary clay *cap* and seeded with grass.



**Entire Site:** In 1988, the following activities were selected to clean up the site: (1) excavation of 10,200 cubic yards of contaminated stream and pond sediments and 87,900 cubic yards of contaminated soil, *backfilling* of those areas with clay, and reseeded the areas; (2) consolidation of all excavated material on site; (3) construction of a groundwater collection drain followed by disposal through either deep well injection or treatment of the water with granular activated carbon prior to off-site discharge; (4) monitoring of both groundwater and surface water; and (5) implementation of land use and deed restrictions. The pond sediments have been excavated, and the demolition of the existing plant has been accomplished. The *closure* of the tank and container storage areas has been completed and the construction of the groundwater collection trench is expected to be completed in 1990. The design of the cap, water treatment, and stream sediment excavation are scheduled to be completed in 1991.

**Site Facts:** In 1989, the EPA and the State reached a settlement with the parties potentially responsible for site contamination to conduct the cleanup actions at the site.

## Environmental Progress



The completed excavation and closure actions described above have greatly reduced the potential for exposure to and *migration* of contaminated materials from the Velsicol Chemical (Illinois) site while further cleanup actions are taking place.

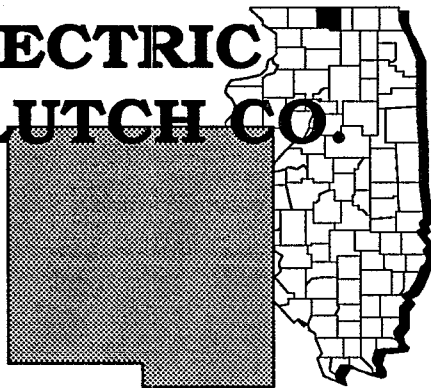




# WARNER ELECTRIC BRAKE & CLUTCH CO.

ILLINOIS

EPA ID# ILD006114151



**REGION 5**  
CONGRESSIONAL DIST. 16  
Winnebago County  
Roscoe

## Site Description

The Warner Electric Brake & Clutch Co. has manufactured drive train components on this 94-acre site since 1957. Chlorinated solvents used in plant operations were present in two on-site *lagoons* that were part of the plant's National Pollutant Discharge Elimination System. Tests conducted in 1984 by Warner found that monitoring wells around the lagoons were contaminated with *volatile organic compounds* (VOCs). VOCs were found in private wells in the Hononegah Country Estates and the Moore Haven Subdivision. In 1984, Warner constructed a public water supply system for Hononegah Country Estates. The system supplies approximately 210 customers. Approximately 7,400 people obtain drinking water from public and private wells within 3 miles of the site. The Rock River is located 3/4 of a mile from the site and is used for recreational purposes.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

## Threats and Contaminants

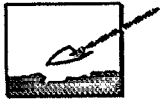


The groundwater is contaminated with VOCs. People may be at a health risk if they swallow or touch contaminated groundwater.

## 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

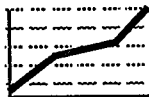


**Immediate Actions:** In 1984, the company removed 16,000 tons of contaminated materials from the two lagoons, transported them to an approved hazardous waste facility, filled the lagoons, *capped* the east lagoon with compacted clay, and covered the lagoons with topsoil. In 1982, the company began providing bottled water to residents of the two subdivisions and, in 1984, constructed a community water supply system.



**Entire Site:** The company has agreed to clean up the *aquifer* containing groundwater contamination. As a result of final cleanup actions, the site may be a candidate for removal from the NPL.

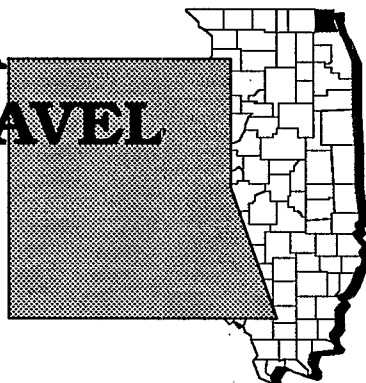
### Environmental Progress



The removal of contaminated materials and the provision of alternate water supplies have greatly reduced the potential for exposure to contaminated materials at the Warner Electric Brake and Clutch Co. site while final cleanup actions are being performed.



**WAUCONDA  
SAND & GRAVEL  
ILLINOIS**  
EPA ID# ILD047019732



**REGION 5**  
CONGRESSIONAL DIST. 10  
Lake County  
1 mile north of Wauconda

**Site Description**

The 74-acre Wauconda Sand and Gravel site includes 52 acres of licensed and unlicensed *landfill* areas. Prior to 1941, a sand and gravel pit operated at the site. The site was then used as a landfill for municipal waste from 1941 to 1978. Approximately 3 million cubic yards of waste were placed in the two landfills operated on site, one licensed and the other unlicensed. The entire site was closed and covered with a layer of clay and soil in 1978. Since the late 1970s, *leachate* had been discharged to nearby Mutton Creek, and surface water sampling taken from this creek in the early 1980s revealed low concentrations of *volatile organic compounds* (VOCs), *polychlorinated biphenyls* (PCBs), and heavy metals. PCBs have not been detected in any subsequent studies. Although the site is currently restricted, the property had once been used for various recreational activities. Approximately 12 homes are located within 1 mile of the landfill.

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

**NPL LISTING HISTORY**

Proposed Date: 07/16/82  
Final Date: 09/08/83

**Threats and Contaminants**



Sampling of the groundwater indicates contamination with heavy metals, VOCs, and pesticides. Leachate is contaminated with heavy metals and cyanide. Health threats include accidental ingestion or touching contaminated groundwater or leachate.

## Cleanup Approach

This site is being addressed in two *long-term remedial phases* focusing on leachate collection and cleanup of the entire site.

### Response Action Status



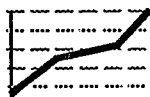
**Leachate Collection:** In 1985, the following remedies were selected for leachate collection: (1) installation of leachate collection drains to stop surface leachate discharge into Mutton Creek; (2) providing for proper disposal of leachate either at the Wauconda Sewage Treatment Plant or a hazardous waste treatment facility; (3) regrading depressed and eroded areas on the existing landfill soil cover with sufficient slope to promote rain *runoff*; (4) revegetating bare and eroded areas to prevent erosion of soils into Mutton Creek; and (5) fencing around the site. By 1987, all of these actions had been completed.



**Entire Site:** In 1989, based upon the site investigations performed by the potentially responsible parties, the EPA selected the following remedies: (1) long-term monitoring of groundwater and Mutton Creek; (2) additional air emission controls, including new and additional vents and, if required, an active collection system with a ground flare or other appropriate treatment; (3) imposing restrictions on use of on-site groundwater; (4) required upgrading of the northern portion of the unlicensed site cover to reduce infiltration, reduce surface gas emissions, and control erosion due to runoff from the site and erosion from Mutton Creek; (5) continued operation of the leachate collection system; and (6) long-term inspection and maintenance of the gas venting and leachate collection systems, site cover, fence, and the monitoring well network. The design of the technical specifications is under way and all clean up activities are scheduled for completion in 1992.

**Site Facts:** An *Administrative Order on Consent* was reached between the EPA, the Illinois Environmental Protection Agency (IEPA), and the Wauconda Task Group in 1986 for additional investigations and the performance of interim cleanup measures. In 1989, an additional *Unilateral Order* was issued.

## Environmental Progress

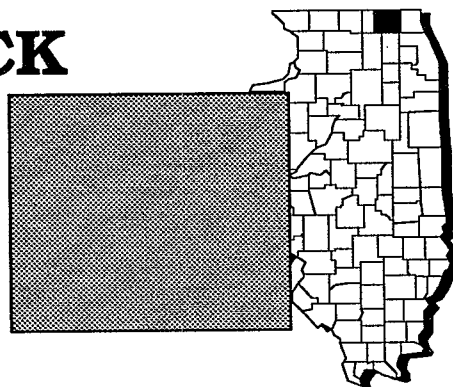


The leachate collection efforts, surface drainage control, and fencing of the site have greatly reduced the potential for exposure to contaminated materials at the Wauconda Sand and Gravel site while further cleanup activities are being completed.



# WOODSTOCK MUNICIPAL LANDFILL ILLINOIS

EPA ID# ILD980605943



**REGION 5**  
**CONGRESSIONAL DIST. 13**  
McHenry County  
Woodstock

## Site Description

The 35-acre Woodstock Municipal Landfill site was an open dump from 1935 to 1975, when the City of Woodstock began to bury municipal waste in on-site trenches. Apparently, the *landfill* also accepted industrial wastes. Approximately 7,200 cubic yards of nickel *sludge* generated by the Autolite Plant in Woodstock were disposed of at the landfill from 1972 to 1974. The landfill stopped accepting waste in 1975. In response to a complaint made by a local resident, the EPA conducted an inspection of the site in 1985 and observed *leachate seeping* out of the soil. The site is presently unfenced. Approximately 12,400 people obtain drinking water from public and private wells located within 3 miles of the site. The City's six municipal wells are also located within 3 miles of the site. The distance from the nearest well to the site is 50 feet.

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

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

## Threats and Contaminants



On-site groundwater, surface water, and *sediments* are contaminated with *volatile organic compounds* (VOCs) and heavy metals. Soils are contaminated with heavy metals including cadmium, chromium, copper, lead, arsenic, and nickel. On-site workers could be exposed to site-related contaminants when touching or accidentally ingesting contaminated soils, surface water, groundwater, and sediments. Since the site is unfenced, trespassers could also be exposed to these contaminants. Because the soil underlying the site is highly permeable, contaminants *migrate* readily from the soil into the groundwater. Freshwater *wetlands* surround the site and could be adversely affected should contaminants migrate into it.

## Cleanup Approach

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

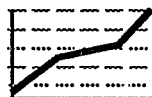
## Response Action Status



**Entire Site:** In 1989, under EPA monitoring, some of the parties potentially responsible for site contamination began an investigation into the nature and extent of contamination. Some of the work being conducted under this investigation includes groundwater, soil, surface water, and air testing and a public and environmental health assessment. Field sampling work began in 1990, and the investigation is scheduled for completion in 1992. Alternatives for cleanup will be recommended based on the results of this investigation.

**Site Facts:** The City of Woodstock, Allied Chemical Corporation, and others identified by the EPA as parties potentially responsible for site contamination agreed to conduct an investigation into the nature and extent of site contamination and the most effective methods to clean up the site in 1989. These activities are in compliance with an *Administrative Order* issued by the EPA in 1989.

## Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Woodstock Municipal Landfill site while further investigations are taking place and cleanup activities are being planned.



# YEOMAN CREEK LANDFILL ILLINOIS

EPA ID# ILD980500102



**REGION 5**  
**CONGRESSIONAL DIST. 13**

Lake County  
Waukegan

**Aliases:**  
**Waukegan Land Reclamation Project**  
**Edwards Field**  
**National Disposal**

## Site Description

The approximately 70-acre Yeoman Creek Landfill site operated as a *landfill* from 1959 to 1969. The landfill has no bottom liner, and the underlying soils are permeable. The landfill is unfenced and unguarded. More than 67,000 people in Waukegan are supplied with drinking water from a Lake Michigan *intake* 10,000 feet downstream of contaminants found in Yeoman Creek at Yeoman Park. Approximately 1,500 people draw drinking water from private wells within 3 miles of the site. The nearest well is 1,600 feet from the site. Apartments, businesses, and *wetlands* surround the site. *Leachate* has been observed *seeping* into Yeoman Creek since 1969, although the quantity decreased substantially after the site cover was upgraded in 1980.

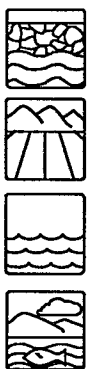
**Site Responsibility:** This site is being addressed through Federal and *potentially responsible parties'* actions.

### NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/31/89

## Threats and Contaminants



Groundwater and leachate are contaminated with ammonia, *polychlorinated biphenyls* (PCBs), and heavy metals including barium, iron, and sodium. In addition, leachate is contaminated with various *volatile organic compounds* (VOCs). *Sediments* of Yeoman Creek at the landfill, and farther downstream at Yeoman Park, contain PCBs and other organic chemicals. Potential health threats to people include touching or accidentally ingesting contaminated groundwater, surface water, soil, or sediments. Since the landfill is unfenced and unguarded, people could come into direct contact with hazardous substances. The wetlands could be threatened by the contaminants.

## 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

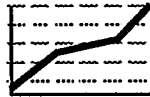


**Immediate Action:** In 1980, the City upgraded the site cover in most areas of the site.



**Entire Site:** The potentially responsible parties, under EPA monitoring, are conducting an investigation into the nature and extent of the contamination at the site. The investigation will define the contaminants and recommend alternatives for the final cleanup. The investigation is scheduled to be completed in 1992.

### Environmental Progress



The City's improvement of the site cover greatly reduced the potential for exposure to and *migration* of contaminated materials from the Yeoman Creek Landfill site while further studies are taking place and cleanup activities are being planned.





## GLOSSARY:

### TERMS USED IN THE FACT SHEETS

**T**his glossary defines the *italicized terms* used in the site fact sheets for the State of Illinois. The terms and abbreviations contained in this glossary are often defined in the context of hazardous waste management as described in the site fact sheets, and apply specifically to work performed under the Superfund program. Thus, 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 may possibly 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 EPA and the parties potentially responsible for site contamination. Under the terms of the Order, the potentially responsible parties 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 EPA directing the parties potentially responsible to perform site cleanups or studies (generally, EPA does not issue unilateral orders for site studies).

**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.

**Backfill:** To refill an excavated area with removed earth; or the material itself that is used to refill an excavated area.

**Berm:** A ledge, wall, or a mound of earth used to prevent the migration of contaminants.

## GLOSSARY

**Bioremediation:** A cleanup process using naturally occurring or specially cultivated microorganisms to digest contaminants naturally and break them down into nonhazardous components.

**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 is generally 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 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.

**Closure:** The process by which a landfill stops accepting wastes and is shut down under Federal guidelines that ensure the public and the environment is protected.

**Consent Decree:** A legal document, approved and issued by a judge, formalizing an agreement between 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 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 ponds and lagoons, to prevent the migration of contaminants into the environment.

**Cooperative Agreement:** A contract between EPA and the states wherein a State agrees to manage or monitor certain site cleanup responsibilities and other activities on a cost-sharing basis.

**Creosotes:** Chemicals used in wood preserving operations and produced by distillation of tar, including polycyclic aromatic hydrocarbons and polynuclear aromatic hydrocar-

bons [see PAHs and PNAs]. Contaminating sediments, soils, and surface water, creosotes may cause skin ulcerations and cancer with prolonged exposure.

**Culvert:** A pipe under a road, railroad track, path, or through an embankment used for drainage.

**Degrease:** To remove grease from wastes, soils, or chemicals, usually using solvents.

**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.

**Downslope:** [see Downgradient].

**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.

**Gasification (coal):** The conversion of soft coal into gas for use as a fuel.

**Impoundment:** A body of water or sludge confined by a dam, dike, floodgate, or other barrier.

**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 where a water supply is drawn from, such as from a river or waterbed.

**Interagency Agreement:** A written agreement between EPA and a Federal agency that has the lead for site cleanup activities (e.g. the Department of Defense), that sets forth the roles and responsibilities of the agencies for performing and overseeing the activities. States are often parties to interagency agreements.

**Lagoon:** A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater. Lagoons are typically used for the storage of wastewaters, sludges, liquid wastes, or spent nuclear fuel.

**Landfill:** A disposal facility where waste is placed in or on land.

## GLOSSARY

**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.

**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 a number of these phases.

**Migration:** The movement of oil, gas, contaminants, water, or other liquids through porous and permeable rock.

**Mine (or Mill) Tailings:** A fine, sandy residue left from ore milling operations. Tailings often contain high concentrations of lead and arsenic or other heavy metals.

**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 EPA is not allowed to start work at a site or initiate enforcement actions against potentially responsible parties, although EPA may undertake certain investigatory and planning activities. The 60-day period may be extended if EPA receives a good faith offer [see Good Faith Offer] within that period.

**Outfall:** The place where wastewater is discharged into receiving waters.

**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.

**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 are often 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 and can make water taste and smell bad.

**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.

**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 emersion oils, and caulking compounds. PCBs are also produced in certain combustion processes. PCBs are extremely persistent in the environment because they are very stable, non-reactive, and highly heat resistant. Burning them produces even more toxins. Chronic exposure to PCBs is believed to cause liver damage. It is also 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.

**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. This means that PRPs may sign a consent decree or administrative order on consent [see Administrative Order on Consent] to participate in site cleanup activity without admitting liability.

**Runoff:** The discharge of water over land into surface water. It can carry pollutants from the air and land into receiving waters.

**Sediment:** The layer of soil, sand and minerals at the bottom of surface waters, such as streams, lakes, and rivers that absorb contaminants.

**Seeps:** Specific points where releases of liquid (usually leachate) form from waste disposal areas, particularly along the lower edges of landfills.

**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.

## GLOSSARY

**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.

**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 also Volatile Organic Compounds].

**Unilateral [Administrative] Order:** [see Administrative Order on Consent].

**Volatile Organic Compounds (VOCs):** VOCs are made 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.

**Wetland:** An area that is regularly saturated by surface or groundwater and, under normal circumstances, 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.