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NATIONAL PRIORITIES LIST SITES: Wisconsin

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Emergency & Remedial Response
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: A BRIEF OVERVIEW

WHY THE SUPERFUND PROGRAM?

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

In all these cases, human health and the environment were threatened, lives were disrupted, 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 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-

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.

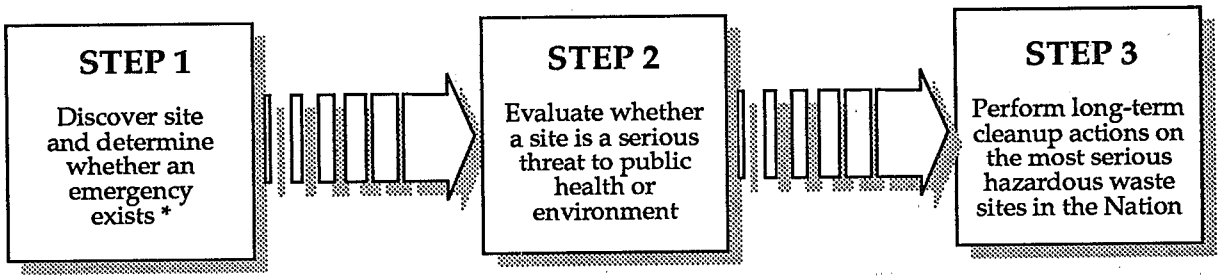
To help you understand the cleanup accomplishments made at these sites, this State volume includes a description of the process for site discovery, threat evaluation and long-term cleanup of Superfund sites. This description — ***How Does the Program Work to Clean Up Sites?*** — will serve as a good 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.

STEP 1: SITE DISCOVERY AND EMERGENCY EVALUATION

How does EPA learn about potential hazardous waste sites?

Site discovery occurs in a number of ways. Information comes from concerned citizens — people may notice an odd taste or foul odor in their drinking water, or see half-buried leaking barrels; a hunter may come across a field where waste was dumped illegally. 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.

What happens if there is an imminent danger?

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

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

Even after any imminent dangers are taken care of, in most cases contamination may remain at the site. For example, residents may have been supplied with bottled water to take care of their immediate problem of contaminated well water. But now it's time to 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.

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

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

How does EPA use the results of the site inspection?

Information collected during the site inspection is used to identify the sites posing the most serious threats to human health and the environment. This way EPA can meet the

requirement that Congress gave them to use Superfund monies only on the worst hazardous waste sites in the Nation.

To identify the most serious sites, 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 are 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.*

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

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

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

The ultimate goal for a hazardous waste site on the NPL is a permanent, long-term cleanup. Since every site presents a unique set of challenges, there is no single all-purpose solution. 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.

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

How are cleanup alternatives identified and evaluated?

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.

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

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

Projects to clean up a hazardous waste site may appear to be like any other major construction project but, in fact, the likely presence of combinations of dangerous chemicals demands special construction planning and procedures. Therefore, the design of the remedy can take anywhere from 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

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

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

The time and cost for performing the site cleanup — called the **remedial action** — are as varied as the remedies themselves. In a few cases, the only action needed may be to remove drums of hazardous waste and 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.

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

No. The deletion of a site from the NPL is anything but automatic. For example, cleanup of contaminated groundwater may take up to 20 years or longer. Also, in some cases 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.

Can EPA make parties responsible for the contamination pay?

Yes. Based on the belief that "the polluters should pay," after a site is placed on the NPL, the EPA makes a thorough effort to identify and find those responsible for causing contamination problems at a site. Although 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.

HOW TO:

USING THE STATE VOLUME

The Site Fact Sheets presented in this book are comprehensive summaries that cover a broad range of information. The fact sheets describe hazardous waste sites on the 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.)

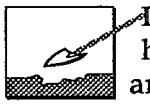
Contaminated **Surface Water and Sediments** on or near the site. (These include lakes, ponds, streams, and rivers.)

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

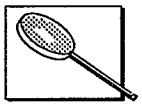
Contaminated **Soil and Sludges** on or near the site.

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.

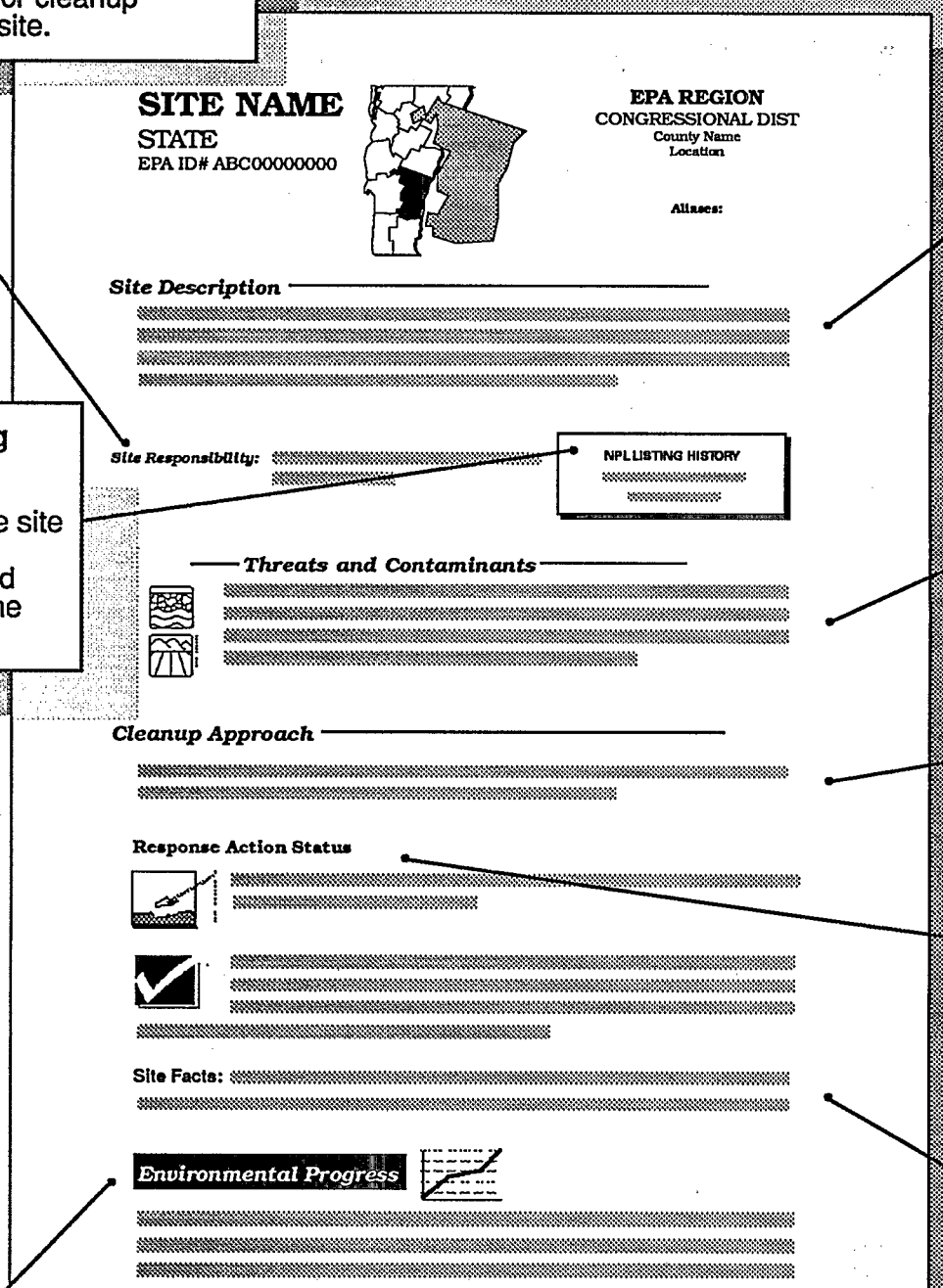
Cleanup Complete shows that all cleanup goals have been achieved for the contaminated site or part of the site.

Site Responsibility

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

NPL Listing History

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



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 Wisconsin

Wisconsin is bordered by Michigan and Lake Superior to the north, Lake Michigan to the west, Iowa and Minnesota to the west, and Illinois to the south. The State covers 56,153 square miles and consists of Lake Superior Lowland plains, Northern Highlands, a sandy Central Plain region, Western Upland in the southwest, and broad ridges with lowlands in the southeast. Wisconsin experienced a 3.2 percent increase in population during the 1980s and currently has approximately 4,855,000 residents, ranking 17th in U.S. populations. Principal State industries include manufacturing, trade, services, government, transportation, communications, dairy and agriculture, and tourism. Wisconsin manufactures machinery, foods, fabricated metals, transportation equipment, paper and wood products.

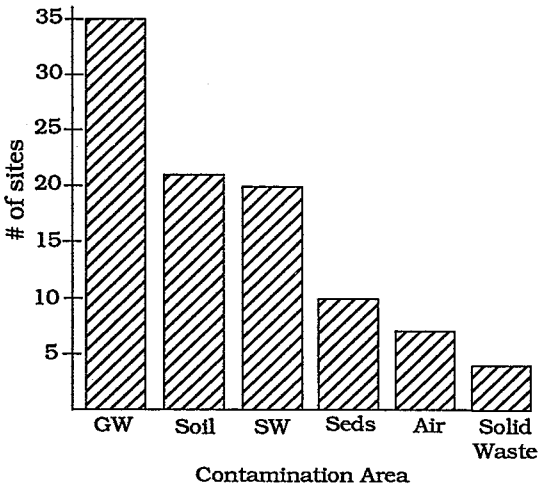
How Many Wisconsin Sites Are on the NPL?

Proposed Sites	3
Final Sites	37
Deleted Sites	0
	40

Where Are the NPL Sites Located?

Cong. District 04	2 sites
Cong. District 07	3 sites
Cong. District 08	4 sites
Cong. District 06	5 sites
Cong. District 01, 02, 09	6 sites
Cong. District 03	8 sites

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



Groundwater: Volatile organic compounds (VOCs), heavy metals (inorganics) and radiation.

Soil and Solid Waste: Volatile organic compounds (VOCs), heavy metals (inorganics), polychlorinated biphenyls (PCBs), other inorganics, and creosotes (organics).

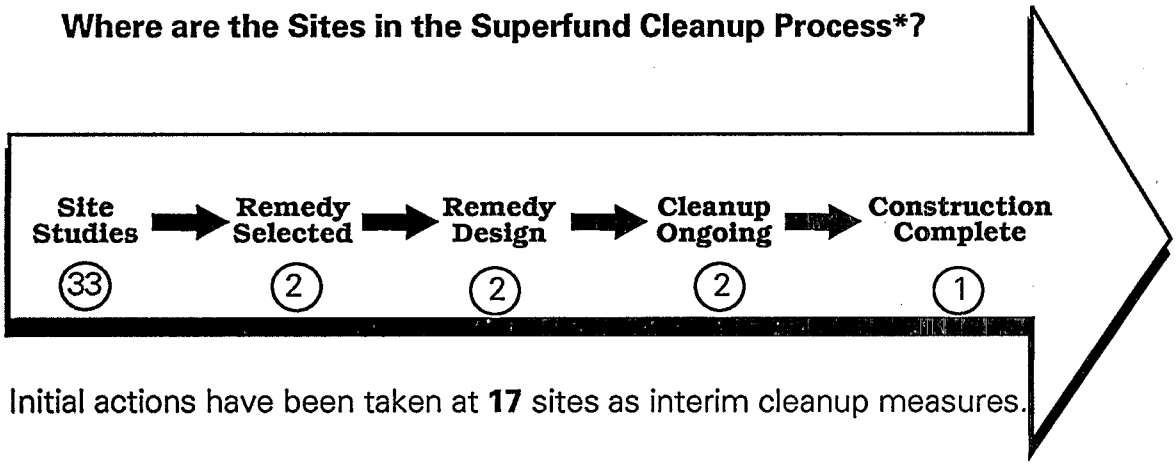
Surface Water and Sediments: Heavy metals (inorganics), and volatile organic compounds (VOCs), creosotes (organics), polychlorinated biphenyls (PCBs) and radiation.

Air: Volatile organic compounds (VOCs) and gases.

*Appear at 10% or more sites

continued

Where are the Sites in the Superfund Cleanup Process*?



Who Do I Call with Questions?

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

Wisconsin Superfund Office	(608) 267-7562
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

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 immediete 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.

Progress Toward Cleanup at NPL Sites in the State of Wisconsin

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete
1	ALGOMA MUNICIPAL LANDFILL	KEWAUNEE	Final	07/21/87		➡				
3	BETTER BRITE PLATING CHROME & ZINC	BROWN	Prop.	10/26/89	➡	➡				
5	CITY DISPOSAL SANITARY LANDFILL	DANE	Final	09/21/84		➡				
7	DELEVAN MUNICIPAL WELL #4	WALWORTH	Final	09/21/84		➡				
9	EAU CLAIRE MUNICIPAL WELL FIELD	EAU CLAIRE	Final	09/21/84	➡	➡	➡	➡	➡	
11	FADROWSKI DRUM DISPOSAL	MILWAUKEE	Final	10/15/87		➡				
13	FORT HOWARD PAPER CO.	BROWN	Prop.	06/24/88	➡	➡				
15	HAGEN FARM	DANE	Final	06/10/86	➡	➡				
17	HECHIMOVICH LANDFILL	DANE	Final	03/31/89		➡				
19	HUNTS DISPOSAL LANDFILL	RACINE	Final	07/21/87	➡	➡				
22	JANESVILLE ASH BEDS	ROCK	Final	09/21/84		➡	➡			
25	JANESVILLE OLD LANDFILL	ROCK	Final	09/21/84		➡	➡			
27	KOHLER COMPANY LANDFILL	SHEBOYGAN	Final	09/21/84		➡				
29	LAUER I SANITARY LANDFILL	WAUKESHA	Final	09/21/84		➡				
31	LEMBERGER LANDFILL, INC.	MANITOWOC	Final	06/10/86	➡	➡				
33	LEMBERGER TRANSPORT & RECYCLING	MANITOWOC	Final	09/21/84		➡				
35	MADISON METRO SEWAGE SLUDGE	DANE	Final	02/15/90		➡				
37	MASTER DISPOSAL SERVICE LANDFILL	WAUKESHA	Final	09/21/84		➡				
39	MID-STATE DISPOSAL, INC. LANDFILL	MARATHON	Final	09/21/84		➡	➡	➡		

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete
42	MOSS-AMERICAN	MILWAUKEE	Final	09/21/84	➡	➡				
44	MUSKEGO SANITARY LANDFILL	WAUKESHA	Final	09/21/84	➡	➡				
46	N.W. MAUTHE COMPANY, INC.	OUTAGAMIE	Final	03/31/89	➡	➡				
48	NATIONAL PRESTO INDUSTRIES, INC.	EAU CLAIRE	Final	06/10/86	➡	➡				
50	NORTHERN ENGRAVING COMPANY	MONROE	Final	09/21/84		➡	➡	➡	➡	➡
52	OCONOMOWOC ELECTROPLATING CO.	DODGE	Final	09/21/84	➡	➡				
54	OMEGA HILLS NORTH LANDFILL	WASHINGTON	Final	09/21/84	➡	➡				
56	ONALASKA MUNICIPAL LANDFILL	LA CROSSE	Final	09/21/84	➡	➡				
58	SAUK COUNTY LANDFILL	SAUK	Final	10/04/89	➡	➡				
60	SCHMALZ DUMP	CALUMET	Final	09/21/84	➡	➡	➡	➡	➡	
62	SCRAP PROCESSING CO., INC.	TAYLOR	Final	09/21/84	➡	➡				
64	SHEBOYGAN HARBOR & RIVER	SHEBOYGAN	Final	06/10/86		➡				
66	SPICKLER LANDFILL	MARATHON	Final	07/21/87		➡				
68	STOUGHTON CITY LANDFILL	DANE	Final	06/10/86		➡				
70	TOMAH ARMORY	MONROE	Final	07/21/87		➡				
72	TOMAH FAIRGROUND	MONROE	Final	07/21/87		➡				
74	TOMAH MUNICIPAL SANITARY LDFL	MONROE	Final	03/31/89		➡				
76	WASTE MGMT OF WI, INC.	WAUKESHA	Prop.	06/24/88		➡				
78	WASTE RESEARCH & RECLAIMATION CO.	EAU CLAIRE	Final	09/21/84		➡				

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete
80	WAUSAU GW CONTAMINATION	MARATHON	Final	06/10/86	➡	➡	➡	➡		
82	WHEELER PIT	ROCK	Final	09/21/84		➡				

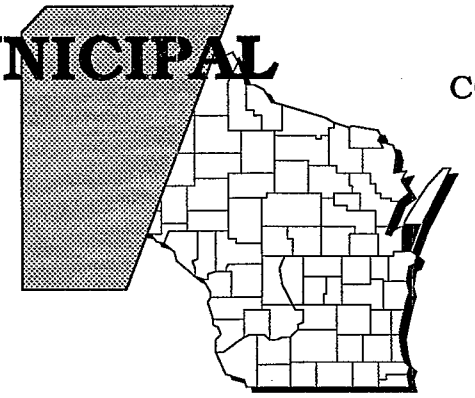
NPL:

Site Fact Sheets

ALGOMA MUNICIPAL LANDFILL

WISCONSIN

EPA ID# WID980610380



REGION 5
CONGRESSIONAL DIST. 08
Kewaunee County
Algoma

Site Description

The 7 1/2-acre Algoma Municipal Landfill was leased from Dumman Realty and operated from 1969 to 1983. In 1970, the *landfill* received a license from the State to accept municipal refuse. While most of the accepted waste was municipal refuse, an unknown amount of finishing materials were disposed of at the landfill. When the landfill closed in 1983, the City covered it with clay and top soil. The landfill, which had no liner, is underlain by a sand and gravel *aquifer* and another deeper aquifer. The two aquifers are hydraulically connected so that water can move between them. The City of Algoma wells draw on the deeper aquifer, and rural wells draw from both aquifers. The site is within 3 miles of Lake Michigan. Krohn's Lake, which is used for recreation, is less than 1 mile away. Approximately 5,000 people depend on groundwater within 3 miles of the site for drinking water. Approximately 180 people live within 1 mile of the site, all using private water supplies. The nearest residence is 1,100 feet away from the site boundary.

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

NPL LISTING HISTORY
Proposed Date: 06/10/86
Final Date: 07/21/87

Threats and Contaminants

In 1984, the EPA detected *volatile organic chemicals* (VOCs) and heavy metals in on-site monitoring wells. Exposure to contaminated groundwater through touching or accidental ingestion may be a potential health threat. The potential exists for *wetlands*, located south of the site, to be affected by the contaminated groundwater that surfaces in the area. However, no release of hazardous materials into the wetlands has occurred.

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 potentially responsible parties, under EPA monitoring, completed an investigation of the site. A draft report indicated that the landfill *cap* does not meet State standards and that the groundwater is contaminated. Once the EPA has completed its review of the investigation, alternatives will be recommended for site cleanup.

Site Facts: Several companies and the City of Algoma, identified as parties potentially responsible for site contamination, have signed an *Administrative Order on Consent* in 1988 with the EPA and the Wisconsin Department of Natural Resources to perform site investigations.

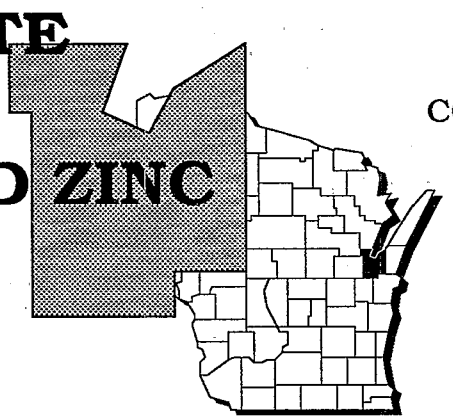
Environmental Progress

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

BETTER BRITE PLATING CO. CHROME AND ZINC SHOPS

WISCONSIN

EPA ID# WIT560010118



REGION 5

CONGRESSIONAL DIST. 08

Brown County

DePere

Aliases:
Better Brite Zinc
Better Brite Chrome

Site Description

The 2-acre Better Brite Plating Co. Chrome and Zinc Shops site consists of two sections that are divided by a residential area. Metal plating operations were conducted at the two shops from the early 1960s until the company filed for bankruptcy in 1985. While the plants were in operation, the Wisconsin Department of Natural Resources (WDNR) documented numerous violations and spills at the facility, including a spill of 2,200 gallons of *acid* in 1979. In order to remedy the situation, Better Brite installed groundwater monitoring wells and constructed a collection system that allowed collected water to be pumped to a central surface water holding pond. Better Brite also constructed a slope to prevent surface water *runoff*. In addition, Better Brite excavated soil from neighboring properties and deposited it on the site. A study of soil in 1979 identified chromium-contaminated soil in the areas west and south of the main building. Although Better Brite was ordered to clean up the contamination in 1980 by the WDNR, no action was taken. Several subsequent inspections by WDNR from 1980 to 1985 revealed extensive on-site chromium contamination, as well as contamination in the building's air handling system. Shortly after operations ceased, the WDNR received a complaint that yellow water was running from the chrome shop into the city sewer. Subsequently, the WDNR investigated this incident and found chromium in the runoff and soil at a neighboring residence. The City of DePere is periodically pumping a trench on the chrome shop property and discharging the waters collected to the DePere Wastewater Treatment Plant. In 1988, the WDNR was notified that the site had been sold, and the new owners planned to remove the plating building. To prevent exposure to contaminated soil, the WDNR razed the main building, partially fenced the site, covered the site with clay, placed topsoil on the clay cover, and seeded it. In 1988, the EPA allocated emergency funds to the WDNR to design a treatment system for water being discharged from the site to the DePere Wastewater Treatment Plant. The owners abandoned the site in 1989. Approximately 46,000 people obtain drinking water from municipal wells within 3 miles of the site. DePere Municipal Well #2 is 500 feet *downslope* of the zinc shop.

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

NPL LISTING HISTORY

Proposed Date: 10/26/89

Threats and Contaminants

Groundwater, surface water, and soil are contaminated with heavy metals including chromium and various *volatile organic compounds* (VOCs). Area residents may be exposed to contaminants through touching or accidentally ingesting these contaminated materials. Contaminants have *migrated* into shallow groundwater that forms the municipal water supply for the town of DePere, and the villages of Allouez and Ashwaubenon. An explosion of the flammable liquids that were dumped directly onto the on-site soil is also possible.

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: The EPA removed over 83 tons of contaminated soil, 9,270 gallons of chromic acid, 3,600 gallons of toxic liquids, 550 gallons of cyanide solution, 150 pounds of cyanide *sludge*, and 500 gallons of flammable liquids from the facility in 1986. These wastes were subsequently treated and disposed of in an EPA-approved *landfill*. In 1987, an additional drum of decontaminated water was removed and transported for treatment off site. The 131 drums containing contaminated material have been secured and staged in the building; the empty drums were secured and staged outside the building. The EPA covered highly contaminated areas of the site with plastic to prevent further off-site migration of contaminants. To ensure security, the EPA is providing 24-hour surveillance until site contamination has been completely addressed. Surface removal of drums, vats, and tanks still remaining on site began in 1990. The water treatment system is to be completed in 1990.

Entire Site: An investigation into the nature and extent of remaining contamination is planned to begin in 1991. Based on the results of this investigation, final site cleanup remedies will be selected.

Environmental Progress

The numerous removal activities described above have greatly reduced the potential for explosion and exposure to hazardous materials at the Better Brite Plating Chrome and Zinc site while final cleanup activities are being planned. The EPA continues to review all remaining surface contaminants and provide security at the site.

CITY DISPOSAL CORP. SANITARY LANDFILL

WISCONSIN

EPA ID# WID980610646

REGION 5

CONGRESSIONAL DIST. 02

Dane County

Town of Dunn

Site Description

The City Disposal Corp. Sanitary Landfill site covers 35 acres of a 58-acre *landfill.* The unlined landfill operated and was filled with municipal and industrial waste from 1966 to 1977. Waste was deposited into on-site *cells.* Six of these cells were used for disposing municipal wastes from 11 surrounding communities in Dane County that were served by the landfill. The other six cells were not used for disposal during the lifetime of the landfill. From 1966 until 1975, industrial wastes and organic chemicals were disposed of in a small pit on the eastern side of the landfill. The site was licensed by the State as a solid and hazardous waste landfill in 1971. The permit expired in 1977 and was not reissued. Reportedly, 55-gallon drums and bulk liquid waste from area industries were deposited on the site and were covered periodically. During the early 1970s, industrial wastes such as solvents, organics, and oily wastes were deposited. About 27 million gallons of potentially hazardous waste were disposed of at the site from 1966 to 1975. Hazardous waste disposal at the landfill was phased out in 1975, and the site was closed in 1977. The site was subsequently *capped.* There are an estimated 5,500 people living within 3 miles of the site. The 160 people residing within a mile of the site depend on private wells. The surrounding area is mainly agricultural. A residential subdivision is located southwest of the site, and a wooded area lies to the south. Badfish Creek, which receives *runoff* from the site, is located 300 feet east of the landfill.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

On-site groundwater and soil are contaminated with *volatile organic compounds* (VOCs) including toluene, benzene, and xylene. Contamination in Badfish Creek includes VOCs such as chloroform and tetrachloroethylene. The City of Madison discharges treated wastewater into the creek, and there are indications that cows drink water from this creek. Potential health threats to people include drinking contaminated groundwater and surface water, accidental ingestion of contaminated soil, inhalation of contaminated dusts and air particles, and direct contact with contaminated groundwater, surface water, and soils. Grass Lake, a habitat for sandhill cranes and other wildlife, is located about 700 feet northeast of the site and could be subject to pollution from the site runoff.

continued

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: Under EPA monitoring, a party potentially responsible for the site contamination, Waste Management of Wisconsin, is conducting an investigation into the nature and extent of the contamination at the site, including a geophysical survey, soil sampling, providing an inventory of existing monitoring wells, and surface monitoring. The investigation will define the contaminants of concern and will recommend alternatives for the final cleanup. The investigation is planned to be completed in 1992.

Site Facts: In 1987, an *Administrative Order on Consent* was entered into between the EPA and City Disposal Corp., a party potentially responsible for the site contamination, requiring the company to investigate the site contamination.

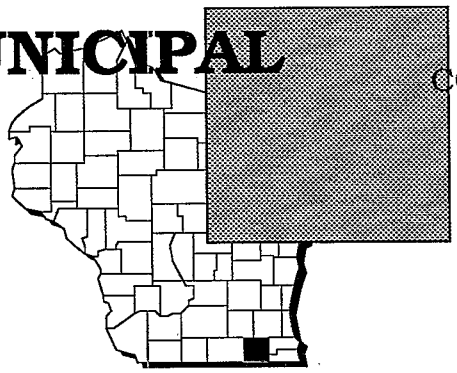
Environmental Progress

After listing the City Disposal Landfill site on the NPL, the EPA conducted preliminary studies and determined that the site does not pose an imminent threat to the surrounding communities or the environment while the investigations leading to the selection of final cleanup solutions for the site are taking place.

DELEVAN MUNICIPAL WELL NO. 4

WISCONSIN

EPA ID# WID980820062



REGION 5
CONGRESSIONAL DIST. 01
Walworth County
Delevan

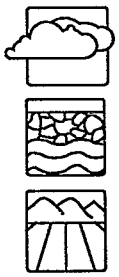
Site Description

The Delevan Municipal Well site is defined as the contaminated *aquifer* used by the Delevan Well No. 4. Well No. 4 was closed in 1982 due to contamination by *volatile organic compounds* (VOCs), but is used occasionally when another city well must be taken out of service. When used, the water from Well No. 4 is blended with other city water to reduce any concentrations of contaminants to levels below what is considered a health risk. The blending occurs at a common point past the inlet for Well No. 4; this requires Well No. 3 to pump at the same time. Recently, when Well No. 3 was shut down, Well No. 4 was used continuously. During that time, unblended water from Well No. 4 may have been delivered to nearby residents, businesses, and a school. There are more than 3,000 people living within 1 mile of the site. The population of Delevan relies on municipal water, and no private wells have been identified in the area. Surrounding the site are schools, homes, businesses, and an industrial facility. The distance from the well to the closest residence is 500 feet.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Air may be contaminated with VOCs from the use of extraction wells or the sprayer-*aerator* system used at a nearby industry. Well No. 4 and the area soils are contaminated with VOCs including *trichloroethylene* (TCE). When Well No. 4 is used to supply water to the municipality, there is the possibility of a health threat to people through drinking, coming in direct contact with, or inhaling contaminated vapors. When Well No. 4 is used, highly contaminated water from the industrial site across the street may be pulled toward the well, potentially increasing VOC concentrations.

continued

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 State, under EPA monitoring, is scheduled to begin conducting an investigation into the nature and extent of the groundwater contamination at the site. The investigation will define the contaminants of concern and will recommend alternatives for the final cleanup. The investigation is planned to be completed in late 1991.

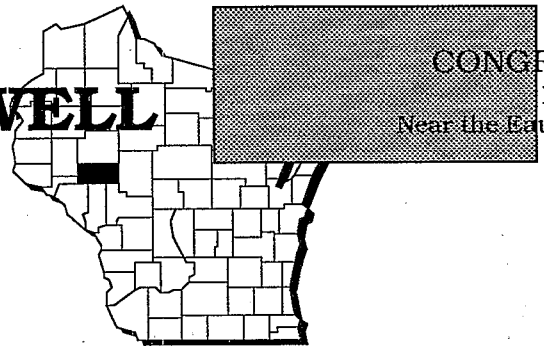
Environmental Progress

The EPA determined, after initial evaluations of the Delevan Municipal Well No. 4 site, that no immediate actions are required to protect the surrounding community or the environment while the investigations leading to the selection of a final remedy for site contamination are taking place.

EAU CLAIRE MUNICIPAL WELL FIELD

WISCONSIN

EPA ID# WID980820054



REGION 5

CONGRESSIONAL DIST. 03

Eau Claire County

Near the Eau Claire Co. Airport, east of the Chippewa River

Site Description

The Eau Claire Municipal Well Field site covers 500 acres and consists of 14 wells that withdraw groundwater for the residents of Eau Claire County. In 1981, the Wisconsin Department of Natural Resources (WDNR) sampled groundwater from the Eau Claire Municipal Well Field as part of an EPA-sponsored groundwater survey of 20 Wisconsin cities. The WDNR's sampling detected low concentrations of *volatile organic compounds* (VOCs), primarily in the north well field. However, the level of VOCs delivered to homes remained below the State water quality standards. In 1982, the City began monitoring VOC levels in residential wells near the municipal field. In 1983, the City found that VOC levels in one of these wells exceeded the State's water quality standards and recommended that its owners use bottled water instead of groundwater. In 1984, five of the municipal wells in the north field also were found to be contaminated with VOCs. The contamination at the site has been characterized as two separate *plumes*. The EPA found that Plume #2 is a part of the National Presto Site, which also is listed on the National Priorities List. The municipal well field serves approximately 57,600 residents of the county. Also, an unknown number of residents in the county pump their own groundwater from privately owned wells.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

Groundwater at the site is contaminated with VOCs including chloroform and *trichloroethylene* (TCE). People can be exposed to VOCs if they drink or touch contaminated groundwater or if they inhale hazardous substances that the water releases into the air. The EPA does not believe that the nearby Chippewa River is affected by the contamination, because pumping of the municipal wells prevents the groundwater from discharging into the river.

continued

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 1984, the EPA conducted an initial study of the nature and extent of contamination at the site. The results of this study recommended *air stripping* as the preferred method to address contamination at the site. In mid-1987, the EPA completed construction of an air-stripping unit to remove VOCs from the contaminated groundwater in the north field. This method treats the groundwater with the air stripper, discharges it to a municipal water treatment plant, and then to a distribution system.

Entire Site: The EPA completed an additional study in 1988 to analyze the various alternatives that best addressed remaining contamination at the site. The EPA selected the following final remedies for the site: (1) withdrawing water from the existing municipal wells in the north well field and removing VOCs from the water using the existing air stripper; (2) installing extraction wells in the north well field and discharging water extracted by those wells directly to the Chippewa River without treatment; (3) installing extraction wells in Plume #2 and discharging water extracted by those wells directly to the Chippewa River without treatment; (4) connecting to the City water system or providing individual treatment units to those residences within the contaminated areas; and (5) monitoring groundwater quality during the action to determine when the groundwater has been cleaned up to meet State and Federal guidelines. The EPA is continuing to treat the municipal groundwater supply with the air stripper and is providing municipal water to users of private well water. By the end of 1990, the EPA will finish hookups to the municipal water supply for those residences which cannot use groundwater, as a result of Plume #1 contamination.

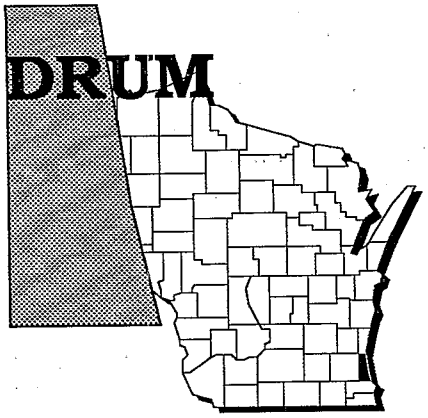
Environmental Progress

The air stripping unit in use at the Eau Claire Well Field site is successfully controlling the level of VOCs in the groundwater being fed to the municipal wells. This action, in addition to hooking up affected residences to the municipal water supply, is protecting the surrounding population and environment while the remaining cleanup activities are being completed.

FADROWSKI DRUM DISPOSAL

WISCONSIN

EPA ID# WID980901227



REGION 5

CONGRESSIONAL DIST. 04

Milwaukee County
Franklin

Alias:
Menard's Drum Disposal Site

Site Description

The Fadrowski Drum Disposal site covers 20 acres on South 27th Street, on the eastern edge of Franklin along its border with Oak Creek. From 1970 until 1981, Edward Fadrowski, of Ed's Masonry and Trucking, operated a *landfill* at the site to dispose of demolition and construction wastes. A former employee alleged in 1981 that the property was used for the disposal of hazardous waste and that several hundred drums and lubricant *sludges* were buried there. Early in 1983, Menard, Inc. purchased part of the site and began to construct a store to sell home building materials. Excavation of the property turned up buried drums, which the State analyzed and found to contain *volatile organic compounds* (VOCs), lead, chromium, and small amounts of arsenic. One sample of oily sludge contained DDT, a pesticide no longer in use. The EPA and the Wisconsin Department of Natural Resources (WDNR) believe that the Acme Printing Ink Company generated the hazardous substances that were disposed of at the site. Little is known about the amounts or type of wastes at the site. Environmental concerns at the site include contamination of the soil and shallow groundwater, which nearby residents use as their source of drinking water. About 18,000 people depend on wells that are within 3 miles of the site as sources of drinking water. The nearest residence is about 1,500 feet from the site. The area is semi-rural and consists of residential, commercial, and municipal uses. There are several schools and parks within a 2-mile radius of the site.

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

NPL LISTING HISTORY

Proposed Date: 06/10/86

Final Date: 10/15/89

Threats and Contaminants

Groundwater samples collected from one of the 22 monitoring wells on site were contaminated with *polycyclic aromatic hydrocarbons* (PAHs). This well is near the southern edge of the site. *Sediment* samples collected from on-site creeks and ditches are contaminated with PAHs and inorganic compounds. Subsurface soil samples collected from the site and off site, near the western side, are contaminated with VOCs, especially toluene. Samples of landfilled waste, primarily sand, collected at the site are contaminated with PAHs and inorganic compounds. One surface water sample taken from the on-site creek contained low levels of

continued

Threats and Contaminants Continued

trichloroethylene (TCE) which is a type of VOC. People could be exposed to hazardous substances through drinking contaminated groundwater or surface water or by accidentally ingesting contaminated soil. A marshy area borders the on-site pond on the west, where *runoff* from the site travels and extends beyond the site's boundaries. The site occasionally is used for recreational activities. Local residents in the area around the site, especially children, use the pond located at the eastern edge of the site for swimming and could thus be exposed to site contamination.

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: Acme Printing Company, under the supervision of the EPA and the WDNR, began a study in 1987 to determine the nature and extent of contamination at the site. The EPA expects to complete the study in early 1991. At that time cleanup alternatives will be recommended.

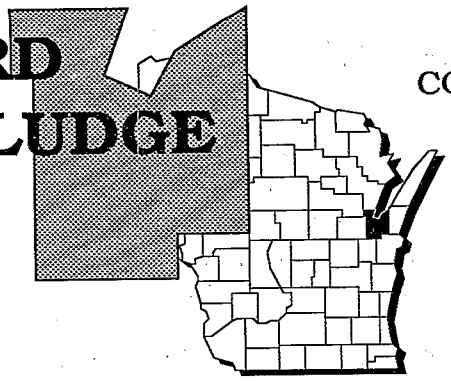
Environmental Progress

After listing the Fadrowski Drum site on the NPL, the EPA performed preliminary evaluations and determined that the site does not pose an immediate threat to the surrounding community and the environment. Studies leading to the selection of a final remedy for the site are currently taking place.

FORT HOWARD PAPER CO. SLUDGE LAGOONS

WISCONSIN

EPA ID# WID006136659



REGION 5

CONGRESSIONAL DIST. 08

Brown County

City of Green Bay

Site Description

The Fort Howard Paper Company owns and operates the 293-acre Fort Howard Paper Co. Sludge Lagoons site, which is located in the corporate limits of the City of Green Bay. The company's manufacturing plant is about 3 1/2 miles from the disposal site. Disposal of *sludge* began in 1964 in a series of *lagoons* separated by dikes constructed of on-site sands. To date, sludge has been placed in five unlined ponds; tests performed in 1980 showed that the sludge contained heavy metals and *polychlorinated biphenyls* (PCBs). An abandoned *landfill* operated by the Village of Ashwaubenon is near two of the ponds. The landfill was closed in the mid-1970s and is now owned by Fort Howard Paper. As much as 40% of the site is within the Oneida Indian Reservation, as set by a 1838 treaty. Drinking water for an estimated 34,200 people is potentially threatened. Austin Straubel Airport is about 600 feet to the south of the site. The Village of Ashwaubenon has two drinking water distribution systems. Wells for both systems are within 3 miles of the site. The City of Green Bay obtains its water from Lake Michigan through a pipeline but maintains a number of wells as backup, one being within 3 miles of the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Threats and Contaminants

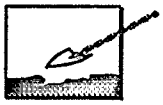
Several monitoring wells on and around the site are contaminated with benzene and chlorinated organic solvents, according to a 1986 report of the Wisconsin Department of Natural Resources (WDNR). The contamination, however, cannot be fully attributed to the sludge disposal. The sludge contains barium, lead, arsenic, dioxins, and PCBs, according to tests conducted by Fort Howard Paper in 1980. Potential health risks may exist from direct contact with or accidental ingestion of the contaminated sludge or groundwater. Permeable soils and shallow groundwater increase the potential for contamination to occur.

continued

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

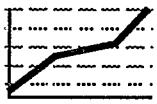


Immediate Actions: The Fort Howard Paper Co. installed a *slurry wall/* gradient control system in 1986 to prevent the *migration* of contaminants through the groundwater and fenced the entire property.

Entire Site: Under EPA monitoring, the parties potentially responsible for the contamination are conducting an investigation to determine the type and extent of contamination at the site and to identify alternative technologies for the remedial process. Once this investigation is completed, the EPA will review the results and will recommend the cleanup alternatives.

Site Facts: In 1990, an *Administrative Order on Consent* was signed by the EPA, the WDNR, the Oneida Tribe of Indians of Wisconsin, and the Fort Howard Paper Company. Under the order, Fort Howard is conducting an investigation of the site.

Environmental Progress

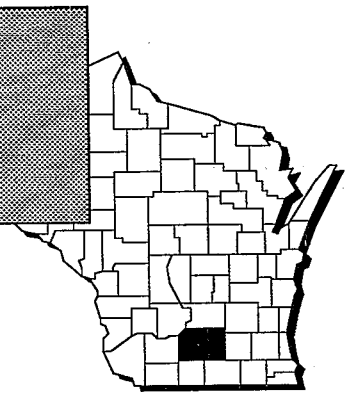


The Fort Howard Paper Co. took interim action to control the migration of contaminants through the groundwater and fenced the site to restrict access. These actions helped to reduce the potential for exposure to hazardous materials on the site while the investigations leading to the selection of a permanent cleanup remedy are being conducted.

HAGEN FARM

WISCONSIN

EPA ID# WID980610059



REGION 5

CONGRESSIONAL DIST. 02

Dane County

1 mile east of Stoughton

Alias:

No Name Property at 2318 County A

Site Description

The Hagen Farm site covers 10 acres and is located approximately 1 mile east of Stoughton. The site operated as a sand and gravel pit from the 1950s until the mid-1960s, when it served as a disposal site for municipal waste from the City of Stoughton and industrial waste from Uniroyal Plastics Corporation, as well as other sources. The site consists of one main disposal area and two smaller areas located in a former gravel quarry. During its operation as a waste disposal site, solvents and other chemicals and chunks of solid vinyl were disposed of at the site. Waste disposal activities ceased at the site about 1966. The disposal area on the site was covered with a layer of soil, and the property was subsequently sold in 1977 to Orrin Hagen, a sheep farmer. In 1980, the Wisconsin Department of Natural Resources (WDNR) received a complaint from a local resident alleging that the site had been used for the disposal of drummed wastes during the 1960s. The WDNR investigated the site, then in use as a sheep pasture, and observed that solid vinyl was protruding through the soil. The WDNR sampled nearby residential wells in 1980 through 1982. During sampling, *volatile organic compounds* (VOCs) were found in nearby residential wells. Uniroyal conducted a study to evaluate groundwater quality at and near the site in 1982 and detected VOCs in the groundwater. In 1987, Orrin Hagen transferred ownership of the site to Waste Management, Inc. (WMI), the current owner. Presently, the site has no houses or farm buildings. The population of the city of Stoughton is estimated to be 7,500. The land surrounding the site is semi-rural and industrial. Homes and industries use private wells; several of the private wells are no longer in use. Approximately 350 people reside within a mile of the site. The majority of Stoughton's residents draw water from the municipal water supply system, and an estimated 940 people depend on private wells located within 3 miles of the site for their drinking water supply. The City of Stoughton's municipal wells are located about 2 miles to the west, and 8 private wells are located within 1,200 feet of the site.

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

NPL LISTING HISTORY

Proposed Date: 09/18/85

Final Date: 06/10/86

continued

Threats and Contaminants

VOCs have been found in the on-site air and in the area surrounding the site. The highest concentrations of VOCs in the air are located near the former disposal areas. On-site groundwater is contaminated with VOCs including dichloroethene, vinyl chloride, and acetone. Area residents could have been directly exposed to site-related contaminants during the 1980s, when protruding drums were found on the site. These drums were subsequently removed; therefore, they are not presently a threat to area residents or on-site workers. Local residents and industrial workers, who rely on the remaining private wells to supply drinking water, could be exposed to contaminants in the groundwater.

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 neighboring land has been purchased by WMI, the houses on that land have been razed, and protruding drums have been removed. The area that comprises the site has been fenced, although an access road to an active gravel pit runs directly past the main dump site.

Entire Site: The potentially responsible parties completed the initial study into the extent and nature of contamination at the Hagen Farm site. The results of the completed studies indicate that the 5-acre disposal area is much smaller than the original estimates. The types of wastes present in the disposal process were also defined and included municipal waste, paint *sludge*, grease, industrial chemicals, and plastic sheeting. The EPA sampled private wells and did not detect the presence of any site-related contaminants. The EPA will conduct a study to evaluate ways to eliminate the potential threat posed by hazardous wastes from the disposal area.

Site Facts: The Wisconsin Department of Justice filed an enforcement action against Uniroyal, Inc. and Waste Management of Wisconsin in 1983, directing them to perform an investigation and to clean up the site.

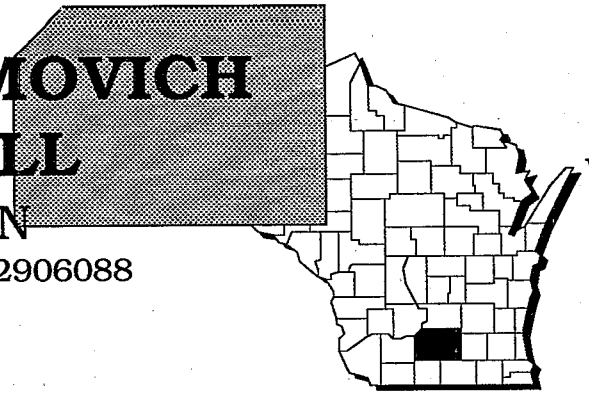
Environmental Progress

By fencing in a major area of the Hagen Farm site and removing contaminated drums, the potential for exposure has been significantly reduced while investigations leading to the selection of final cleanup remedies are taking place.

HECHIMOVICH LANDFILL

WISCONSIN

EPA ID# WID052906088



REGION 5

CONGRESSIONAL DIST. 02

Dane County

Williamstown, approximately 2 miles from Mayville

Site Description

The Hechimovich Landfill site is situated on 20 acres and is located in Williamstown, a rural area located approximately 2 miles south of Mayville. The site is a former licensed disposal area for hazardous waste that operated from 1970 to 1980. The owner of the site claims that he placed hazardous waste in unlined pits from 1972 to 1980. Some of the types of wastes disposed of in these pits include paint *sludges*, cutting oils containing lead and chromium, and spent organic solvents. The Wisconsin Department of Natural Resources (WDNR) ordered the pits closed in 1980. The EPA detected *volatile organic compounds* (VOCs) in two wells *downgradient* of the site in 1984. The owner of the site violated the terms of the *landfill's* permit by depositing solid waste in areas beyond those previously approved by the WDNR. As a result, a proposal was made to build a separate sanitary landfill to the north of the operating site. In 1988, approval for the new landfill was being sought through the State; the new landfill has not yet been built. The towns nearest to the site are Mayville, with a population of 4,330, and Horicon, with 3,585 residents. Approximately 5,000 people obtain their drinking water from private wells located within 3 miles of the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/31/89

Threats and Contaminants

Drinking water in two wells *downslope* of the site has been shown to be contaminated with VOCs including ethylbenzene and xylene. Cutting oil left on the site is contaminated with significant amounts of lead and chromium. Because groundwater contamination already exists in two wells, it is possible that other wells may also become contaminated. Farmland is located 20 feet from the operating portion of the facility, and a portion of this land is used to raise dairy cattle. The cattle could consume tainted grass or *leachate* flowing from the site's drainage ditches. Local surface waters are used by residents for recreational activities. If site-related contaminants should *migrate* into the surface water, residents could be exposed to them when coming into direct contact with these bodies of water. A portion of the Hechimovich Landfill site is a *wetland*, which could be at risk from site *runoff*.

continued

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 preliminary phase of the investigation into the nature and extent of contamination and alternative cleanup methods was started in 1990. This study, expected to be completed in 1993, is being conducted by the parties potentially responsible for the site contamination, under the direction of the WDNR.

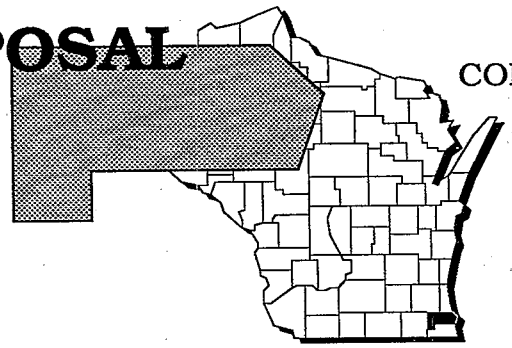
Environmental Progress

After adding the Hechimovich Landfill site to the NPL, the EPA determined, after initial evaluations, that the site does not pose an immediate threat to the surrounding communities or the environment while the investigations leading to the selection of a final cleanup remedy are taking place.

HUNTS DISPOSAL LANDFILL

WISCONSIN

EPA ID# WID980511919



REGION 5

CONGRESSIONAL DIST. 01

Racine County
Caledonia

Site Description

The Hunts Disposal Landfill site consists of 35 acres of a 79-acre parcel and is located 8 miles north of Racine in Caledonia. This site is an old sand and gravel pit that was first licensed to operate as a dump by the Racine County Board of Adjustments in 1959. From 1959 to 1974, the various owners of the site accepted both industrial and municipal wastes. In 1970, the State granted a license to the owners of the *landfill* that allowed them to accept non-combustible trash, garbage, and wooden material. In 1974, the site was purchased by Waste Management, Inc. of Wisconsin from Caledonia Corporation Landfill, which had acquired it in 1972, when it was operating as Hunts Disposal Landfill. During the late 1960s and early 1970s, area residents reported seeing people driving cars to the site and dumping garbage into the ditch near the railroad tracks. Residents also complained that the site was poorly covered. In 1964, four 10,000-gallon tanks containing residual arsenic *acid sludge* were buried at the site. According to files kept by Racine County, these tanks were cleaned before they were buried. During 1973 to 1974, the State noted several operational problems such as *seepage* of wastes into the groundwater, lack of proper cover, and windblown paper. The Hunts Disposal site was closed in 1974. An inspection conducted by the State in 1975 noted deficiencies in final cover and topsoil depths, severe gully erosion on some slopes, and the absence of vegetative cover over portions of the landfill. The site was purchased by the Boundary Corporation in 1975. In 1976, the County purchased the site as a part of the Root River Parkway System, a regional park concept. The Hunts Disposal site is located in a rural area that is sparsely populated; however, there are several residences located in the immediate vicinity of the site and within the boundaries of Caledonia. Approximately 1,500 people live within a 1-mile radius of the site. All of the residences in the vicinity of the site rely on private wells for their water supply. A subdivision of approximately 1,000 people is located 1 to 1 1/2 miles west of the landfill site across the Root River. These residents obtain their water from a private sanitation district. Residents of Oak Creek rely on municipal wells that draw water from depths of approximately 1,800 feet.

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

NPL LISTING HISTORY

Proposed Date: 06/10/86

Final Date: 07/21/87

continued

Threats and Contaminants

On-site soils and groundwater are contaminated with several types of *volatile organic compounds* (VOCs) and heavy metals. Groundwater and surface water on the eastern side of the site are contaminated with heavy metals including arsenic, barium, calcium, and vanadium. Soils, taken from the landfill area, are contaminated with heavy metals and VOCs. On-site workers and trespassers could be exposed to site-related contaminants by accidentally ingesting or coming into direct contact with contaminated groundwater, surface water, soils, or *sediment*. *Hydrogeologic* conditions favor the *migration* of groundwater off site. If groundwater contamination migrates into private and municipal wells, area residents could be exposed to contaminants in the groundwater. If area residents consume the wild game which has been observed on the site, they could be exposed to site-related contaminants that have *bioaccumulated* in these animals. The Root River, which is used by area residents for recreational purposes, borders the site, and *runoff* from the contaminated soils and surface water could pollute these waters and sediments.

Cleanup Approach

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

Response Action Status

Initial Actions: Waste Management and Racine County made an attempt to abandon the site according to proper procedures in 1982 and conducted several activities including repairing erosion damage, sealing *leachate* seeps, and revegetating the site. In response to a request from the State and from a proposal to construct a drainage channel in the vicinity of the site, the City of Oak Creek installed three shallow monitoring wells in 1984. The EPA conducted an inspection of the site in 1984 and took several samples of soils, surface waters, groundwater, and sediments.

Entire Site: The EPA and the State began an investigation into the nature and extent of contamination and the most effective methods to clean up the site in 1988. Between 1988 and 1989, the following activities were performed as part of this investigation: (1) installation of 19 wells designed to evaluate the quality of the groundwater in the vicinity of the landfill; (2) installation of three wells into the waste material comprising the landfill; and (3) surveying the site for the presence of radioactivity. In addition, several other activities performed as part of the investigation include sampling residential drinking water wells in the vicinity of the landfill, water from the Root River and the lake on the site, and surface and subsurface soil; sediment from the bottom of the lake, river, and other ponds; and air from within the gaseous environment of the landfill. Although the findings are still being evaluated, it has been determined that there is no evidence suggesting local residential water supplies have been affected by site-related contaminants.

continued

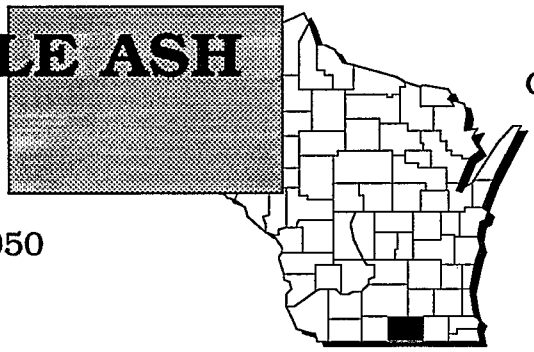
Environmental Progress

Two separate sampling efforts have been performed at the Hunts Disposal site and areas of suspected contamination near the site. The results of these sampling events have isolated the areas of greatest contamination and will help in selecting the most effective remedies for final cleanup once the investigations have been completed.

JANESVILLE ASH BEDS

WISCONSIN

EPA ID# WID000712950



REGION 5

CONGRESSIONAL DIST. 01

Rock County
Janesville

Alias:
Janesville Disposal Facilities

Site Description

The Janesville Ash Beds site covers about 5 acres of a 65-acre parcel of land on the north side of Janesville. There are four Janesville Disposal Facilities (JDF) on these 65 acres: the Janesville Ash Beds (JAB), the Old Dump Site (1963 site), the Old Landfill (1978 site), and the New Landfill (1985 site). The City of Janesville is the primary owner of the properties and has operated land disposal activities at the site since the 1950s. The JAB began operating in 1974 and consisted of five separate ash beds. The facility accepted an assortment of industrial liquids and *sludges*. Approximately 1 1/2 to 3 million gallons of industrial sludges were accepted annually. *Fly ash* and the resultant dried sludges were sent to the Old Landfill for disposal from 1974 to 1978 and then to the New Landfill. From 1974 to 1982, the ash beds were unlined, with only a plastic liner beneath a small portion of the bed to serve as a *leachate* sampling system. In the fall of 1982, beds #3, #4, and #5, were excavated, contaminated ash and soils were removed, and the beds were reconstructed with clay liners and equipped with leachate collection systems. Industrial wastes were still being accepted at beds #1 and #2 while the other three beds were being reconstructed. Bed #1 was closed, and the sludge was removed in 1983. Wastes were not accepted at bed #2 after 1983, and the sludge was removed in late 1984. In 1985, the remaining three beds (#3, #4, and #5) were cleaned and closed, and the entire JAB area was covered with clay and graded. The Old Dump Site is an abandoned sand and gravel pit that was used as a municipal *landfill* from 1950 until 1963. The Old Dump Site does not have a leachate collection system or clay liner, and the exact type of wastes are unknown. After reaching capacity in 1963, the dump was closed by placing a cover over the wastes. The New Landfill was used as a municipal landfill from 1978 until 1985. It was constructed with a clay liner and leachate collection system to prevent leachate from reaching the groundwater. Over 1,000 tons of ash from the JAB had been disposed of in the New Landfill. After reaching capacity, the site was covered with 2 feet of compacted clay and closed in compliance with Wisconsin regulations. (For further information on the Old Landfill, see the separate listing under Janesville Old Landfill.) Janesville has a population of approximately 51,000 people. Residential areas are located within a few hundred feet of the Janesville disposal facilities. A number of parks are within 2 miles of the sites and two schools are within 1 mile. The Rock River about 1,500 feet away from the sites.

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

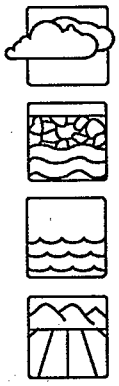
NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

continued

Threats and Contaminants



In most instances, all four facilities have contributed to contamination in the air, groundwater, *sediments*, soil, and surface water. Methane gas has been detected in the air at the site. The methane is caused by the decomposing material stored in the landfill. Groundwater is contaminated with *volatile organic compounds* (VOCs) including benzene, acetone, and vinyl chloride and heavy metals including arsenic, barium, lead, iron, and manganese. Sediments in the pond southeast of the Old Landfill contain acetone and magnesium. Sediments in the Rock River also contain magnesium. Soil is contaminated with VOCs including chloroform, ethylbenzene, and tetrachloroethene and the heavy metals manganese and cadmium. Surface water in the Rock River contains low levels of VOCs. Contaminated groundwater currently is not considered to be a concern, because no private drinking water wells are contaminated or appear to be threatened. Small amounts of contaminants in the Rock River and the on-site pond pose a very low health risk.

Cleanup Approach

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

Response Action Status

Entire Site: The potentially responsible parties, under EPA monitoring, completed a study of the four Janesville Disposal facilities. The EPA selected the remedies for the site in December 1989, breaking down the site into five cleanup components. The remedies include: (1) New Landfill: Access restrictions by the use of deed and land use restrictions, installation of a landfill gas extraction and flaring system that may later be converted into an energy converting system, improvements to the landfill *cap* including upgrading it, continued monitoring of the groundwater and air, and repairing and/or improving the leachate collection system. (2) Old Landfill: Access restrictions through deed and land use restrictions, installing a landfill gas extraction and flaring system, *containment* of wastes and subsurface soils by upgrading the landfill cover, and continued groundwater and air monitoring. (3) Old Dump: Access restrictions through deed and land use restrictions and continued groundwater monitoring. (4) JAB: Access restrictions through deed and land use restrictions; containment of wastes and subsurface soils by maintaining the present cap and upgrading the cap and site drainage, as needed; and removing and properly disposing of the remaining ash pile. (5) JDF Groundwater: Installation of groundwater extraction wells to intercept the groundwater contamination prior to its reaching the Rock River, development and implementation of groundwater treatment system with treatment by *air stripping*, and continued groundwater monitoring.

Site Facts: In 1986, the EPA, the State, and the parties potentially responsible for site contamination reached an agreement whereby the parties will conduct an investigation of the contamination at the Janesville facilities. The Old Landfill and JAB sites are being addressed under Superfund, while the other two sites are being cleaned up under the authority of the Resource Conservation and Recovery Act (RCRA) regulations. These two RCRA sites were included in the National Priorities List investigation because of their close proximity to the Old Landfill and JAB areas.

continued

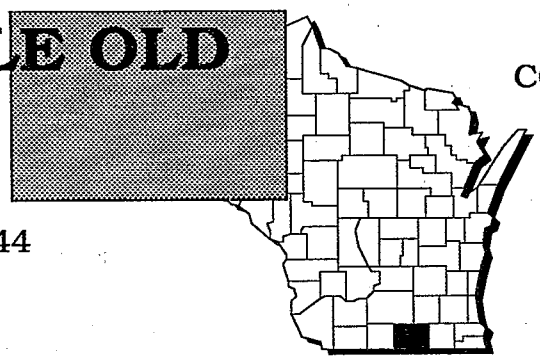
Environmental Progress

The complexity of the separate areas at the Janesville Ash Beds site required extensive studies into the extent of contamination prior to the selection of final cleanup remedies. These investigations have resulted in the selection of final remedies for all the areas of contamination, with actual cleanup activities scheduled to begin soon.

JANESVILLE OLD LANDFILL

WISCONSIN

EPA ID# WID980614044



REGION 5

CONGRESSIONAL DIST. 01

Rock County
Janesville

Alias:
Janesville Disposal Facilities

Site Description

The 18-acre Janesville Old Landfill site is on a 65-acre parcel of land that contains four different sites: the Janesville Ash Beds (JAB), the Old Dump Site, the Old Landfill, and the New Landfill. The city of Janesville is the owner of the properties and has operated land disposal activities at the sites since the 1950s. The Janesville Old Landfill site is an abandoned sand and gravel pit that was used as a municipal sanitary *landfill* beginning in 1963. Industrial wastes such as solvents, used oils, paints, paint thinners, and other industrial wastes were accepted drummed for disposal. The site also received the *sludge*-ash mixture when the ash beds were cleaned out. The landfill does not have any bottom or side liners, but was covered with clay when it reached capacity in 1978. The landfill does not have a *leachate* collection system or clay liner. The City of Janesville has a population of approximately 51,000 people. Residential areas are located within a few hundred feet of the Janesville Disposal Facilities. The Rock River is 1,500 feet from the site.

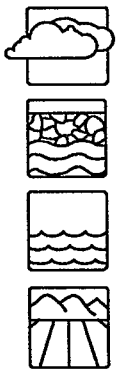
Site Responsibility: This site is being addressed through Federal, State, and *potentially responsible parties'* actions.

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants



Methane gas from the decomposing material stored in the landfill has been detected in the air at the site. Groundwater is contaminated with *volatile organic compounds* (VOCs) and heavy metals including arsenic, barium, lead, iron, and manganese. *Sediments* in the pond southeast of the Old Landfill contain acetone and magnesium. Sediments in the Rock River also contain magnesium. Soils are contaminated with various VOCs and heavy metals including manganese and cadmium. Surface water in the Rock River contains low levels of VOCs. Contaminated groundwater is not considered a health threat because no private drinking water wells are contaminated or appear to be threatened. Small amounts of contaminants in the Rock River and the on-site pond pose a very low health risk.

continued

Cleanup Approach

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

Response Action Status

Old Landfill Site: The parties potentially responsible for site contamination, under EPA monitoring, completed a study of all of the Janesville Disposal Sites. The EPA selected a remedy for the site in 1989 which includes: (1) access restrictions by the use of deed and land use restrictions; (2) installation of a landfill gas extraction and flaring system that may later be converted into an energy converting system; (3) improvements to the landfill *cap*; (4) continued monitoring of the groundwater and air; (5) repairing and improving the leachate collection system; (6) removing and properly disposing of the remaining ash pile; (7) installation of groundwater extraction wells to intercept the groundwater contamination prior to reaching the Rock River; and (8) development and implementation of a groundwater treatment system with treatment by *air stripping*.

Site Facts: In 1986, the EPA, the State, and the parties potentially responsible for site contamination reached an agreement, whereby the parties conducted an investigation of the nature and extent of contamination at the Janesville Disposal sites. (For further information on the JAB, Old Dump Site, and New Landfill, see the separate listing under Janesville Ash Beds.)

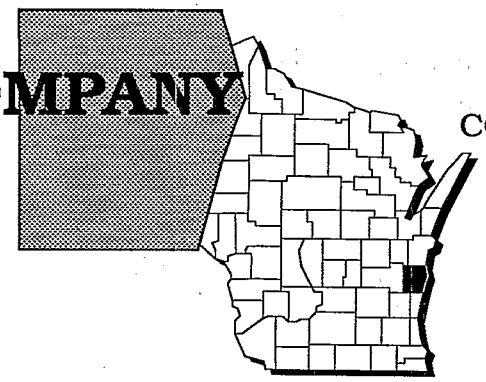
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Janesville Old Landfill site while the selected cleanup activities are being planned.

KOHLER COMPANY LANDFILL

WISCONSIN

EPA ID# WID006073225



REGION 5
CONGRESSIONAL DIST. 06
Sheboygan County
Kohler

Site Description

The 82-acre Kohler Company Landfill site has been in operation since the 1950s, primarily for the disposal of foundry and manufacturing wastes produced by Kohler's manufacturing facilities. From 1972 to 1976, wastes were disposed of in an old waste pit, two burn pits, and a liquids disposal pit. Wastes included hydraulic oils, solvents, paint wastes, enamel powder, lint from brass polishing, and plating *sludges*. Oils were commonly used for dust control measures. The company also operates two *lagoons* west of the *landfill* that reduce the total suspended solids in the company's process wastewater before it is discharged into the Sheboygan River. Since 1980, all federally regulated wastes have been shipped off site for disposal. In 1977 and 1981, sludges from the lagoons were buried at the site. The landfill was not scheduled to close until 2035; however, the State landfill license is being modified, and the *closure* of the landfill will occur much sooner. Approximately 1,600 people live within 3 miles of the landfill. The nearest residence is 1/4 mile away. The Sheboygan River is within 300 feet of the site. Residential wells within 3 miles draw water from *aquifers* that could become contaminated.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

Groundwater and surface water are contaminated with various *volatile organic compounds* (VOCs), heavy metals, *phenols*, and phthalates. *Runoff sediments* contain various heavy metals, phenols, and coal tar compounds. Waste samples from the old waste pit contain VOCs, phenols, coal tar compounds, and heavy metals. People who touch or accidentally ingest contaminated groundwater, *leachate*, or runoff sediment may be at risk. If leachate or groundwater from the site *seeps* into the Sheboygan River, wildlife in and around the river may be harmed.

continued

Cleanup Approach

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

Response Action Status

Entire Site: In 1985, the Kohler Company, under EPA monitoring, began investigating the contamination at the site. Two phases of investigations have been completed, with the third phase under way. Once the entire investigation is completed in 1991, alternative measures will be recommended for site cleanup.

Site Facts: In 1985, the EPA, the State, and the Kohler Company signed an *Administrative Order on Consent,* whereby the company agreed to study the type and extent of contamination at the site. The company will also assess potential and actual risks to human health and the environment and evaluate potential cleanup alternatives.

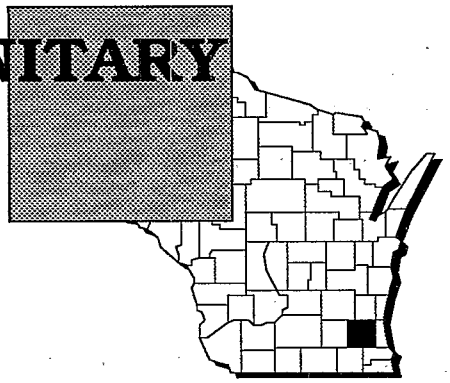
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Kohler Company Landfill site while investigations are under way.

LAUER I SANITARY LANDFILL

WISCONSIN

EPA ID# WID058735994



REGION 5

CONGRESSIONAL DIST. 09

Waukesha County

Menomonee Falls

Aliases:

Waste Management Lauer I

United Waste Systems

Site Description

From the mid-1950s to 1972, the 56-acre Lauer I Sanitary Landfill accepted a variety of municipal and industrial wastes. In 1973 and 1974, State inspectors revealed holes in the *berm* around the site that allowed *leachate* from a collection pond to escape into a drainage ditch that drains into the Menomonee River. In 1974, the State issued an order for the owner to close the site. In 1981, the owner installed an underground wall of clay materials between the *landfill* and the pond to stem the flow of leachate. Presently, leachate accumulating behind the cutoff wall is sent to a municipal wastewater treatment plant. Approximately 23,500 individuals reside within a 3-mile radius of the site.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

Soils and leachate are contaminated with benzene, cyanide, toluene, and zinc. People may be exposed to contaminants through accidental ingestion or by touching contaminated soil or leachate. Although the landfill has been covered and seeded for recreational use, leachate continues to threaten groundwater and nearby surface waters. Also, contaminants may enter the food chain by way of locally raised meats and vegetables.

Cleanup Approach

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

continued

Response Action Status

Entire Site: An investigation to determine the extent and nature of contamination and to identify alternative long-term remedial methods is scheduled to begin in late 1990, under State guidance.

Site Facts: In 1974, the State issued an order for the owner to close the site properly. Negotiations between the State and one potentially responsible party, Waste Management of Wisconsin, began in 1988. An agreement between the State and Waste Management is expected to be signed in 1990, requiring the company to take responsibility for investigating site contamination.

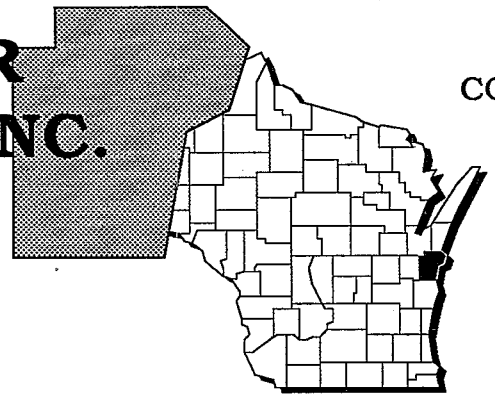
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions are required at the Lauer I Sanitary Landfill site while investigations are being planned.

LEMBERGER LANDFILL, INC.

WISCONSIN

EPA ID# WID980901243



REGION 5

CONGRESSIONAL DIST. 06

Manitowoc County
Whitelaw

Alias:
Lemberger Fly Ash Landfill

Site Description

The 21-acre Lemberger Landfill, Inc. site is located approximately 1/4 mile from Lemberger Transport and Recycling, also a National Priorities List site. The two sites operated under the same license from 1970 through 1976. The Township of Franklin used the site, an old gravel pit, as an open dump from 1940 to 1970. Lemberger Landfill, Inc. operated the site as a sanitary *landfill* with permission to accept hazardous wastes under a license from the Wisconsin Department of Natural Resources (WDNR) from 1970 to 1976. From 1976 to 1977, Wettencamp and Brunner Excavating Company transported *fly ash* from Manitowoc Public Utilities to the Lemberger facility. An estimated 1,750 to 2,500 cubic yards of fly ash were disposed of monthly. Past WDNR inspections showed that Lemberger used fly ash and bottom ash as cover instead of burying them along with the refuse. Lemberger placed a second *cap* on the landfill in 1981. In 1985, *volatile organic compound* (VOC) contamination was found in residential wells at levels that exceeded standards. New wells were provided to residents with contaminated wells. Part of the site is bordered by a marsh. *Wetland* vegetation occupies low-lying areas of the site. The nearby Branch River is used for swimming, fishing, and canoeing, and the area is commonly used for hunting. Approximately 2,700 people live within 3 miles of the site. The residents depend on public and private wells within 3 miles of the site as a source of drinking water.

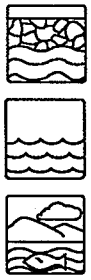
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 09/18/85

Final Date: 06/10/86

Threats and Contaminants



The groundwater is contaminated with VOCs including vinyl chloride and methylene chloride. Surface water is contaminated with *phenols*, VOCs, and heavy metals including cadmium and lead. Potential health threats exist if contaminated groundwater is ingested or touched. Contaminants have entered the food chain; therefore, ingesting milk or livestock and fish taken from the river may also be a potential health threat. The Branch River has shown signs of contamination, and exposure to these contaminants may occur when coming into direct contact with polluted surface water. The site is not fenced or posted with signs to restrict access.

continued

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: New wells were drilled to provide water to residences having contaminated wells.

Entire Site: In 1984, the EPA sampled monitoring wells and *leachate* at the site. The results showed elevated levels of several contaminants. In 1987, the EPA began an investigation to determine the extent and nature of contamination and to identify cleanup alternatives. A draft investigation report is expected to be completed in 1990.

Site Facts: In 1982, Lemberger signed a *Consent Order* with the WDNR that required identification of the source of leachate controls, followed by groundwater monitoring. Drilling and testing was done until the owner filed for bankruptcy.

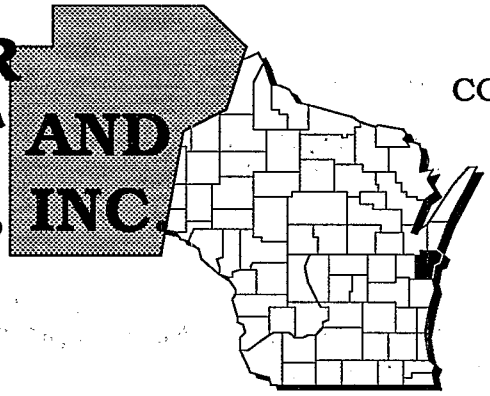
Environmental Progress

By providing an alternate water supply to affected residents, the potential for exposure to contaminants in the groundwater has been eliminated while investigations leading to the selection of final cleanup remedies are taking place at the Lemberger Landfill, Inc. site.

LEMBERGER TRANSPORT AND RECYCLING, INC.

WISCONSIN

EPA ID# WID056247208



REGION 5

CONGRESSIONAL DIST. 06

Manitowoc County

Whitelaw

Site Description

The 16-acre Lemberger Transport and Recycling, Inc. site operated as an unlined *landfill*. From 800,000 to 1 million gallons of tars and paint *sludges* were buried at the site. Heavy metals and *phenols* have *leached* into groundwater. Large quantities of aluminum dust are also buried on the site, as are *polychlorinated biphenyls* (PCBs) from the cleanup of a spill. The owner of the farms adjoining the landfill has plowed portions of the site, exposing bulk wastes and drums. Alfalfa currently is being grown on the site. This site is located less than 1/4 mile away from the Lemberger Landfill, also a National Priorities List site. The Branch River, 1/2 mile west of the site, is used for swimming, fishing, and canoeing. Hunting occurs in the area, and site access is unrestricted. Approximately 2,700 individuals live within 3 miles of the site and obtain their potable water supply from a shallow *aquifer*.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

The groundwater underlying the site has been shown to be contaminated with various *volatile organic compounds* (VOCs), phenols, and heavy metals including lead, chromium, and aluminum. Potential health threats include drinking or touching contaminated groundwater.

Cleanup Approach

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

continued

Response Action Status

Entire Site: In 1987, the EPA began an investigation to determine the extent and nature of contamination and to identify alternative long-term cleanup methods. A draft investigation report is expected to be completed in late 1990.

Site Facts: In 1982, the State signed a *Consent Order* with the company requiring it to report on site conditions, including an analysis of the extent of groundwater contamination and recommendations for cleanup actions.

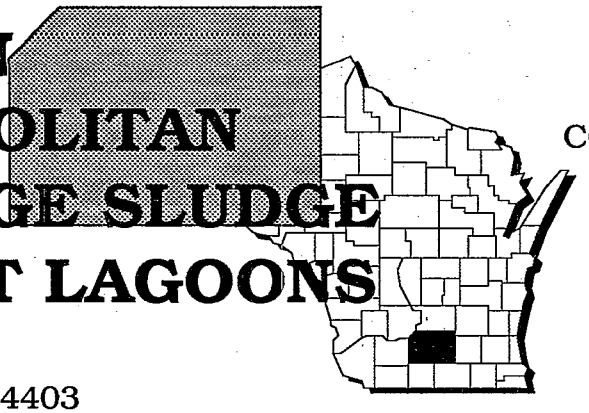
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Lemberger Transport and Recycling, Inc. site while investigations are taking place and cleanup activities are planned.

MADISON METROPOLITAN SEWERAGE SLUDGE DISTRICT LAGOONS

WISCONSIN

EPA ID# WID078934403



REGION 5

CONGRESSIONAL DIST. 02

Dane County

Madison

Site Description

The 135-acre Madison Metropolitan Sewerage Sludge District Lagoons site is owned by the City of Madison, which has been depositing *sludge* from its Nine Springs Sewer Treatment Plant in the two *lagoons* since 1942. In 1970, a section of the new lagoon's dike broke, releasing 85,000 gallons of liquid from the lagoons into an old *effluent* channel that runs north to Nine Springs Creek, which empties into the Yahara River. A large number of fish were killed. A second dike broke in 1973. The lagoons are in a low-lying area bordered by *wetlands*. Approximately 94,000 people reside near the site and obtain drinking water from wells within 3 miles of the site. A mobile home park of about 250 units is 1,000 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 02/15/90

Threats and Contaminants

The sludge in the lagoons is contaminated with *polychorinated biphenyls* (PCBs) and is a potential health concern to people living near the site, and those working on the cropland where sludge is applied may be exposed to PCBs. Hunting occurs in the wetland adjacent to the site. The lagoons are feeding areas for many species of waterfowl. In addition, surface water in the old effluent channel is tainted from the PCB-contaminated sludge.

Cleanup Approach

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

continued

Response Action Status

Entire Site: The State is planning to conduct an investigation of the site to determine the nature and extent of contamination. Alternative cleanup remedies will be evaluated, based on the findings of this investigation.

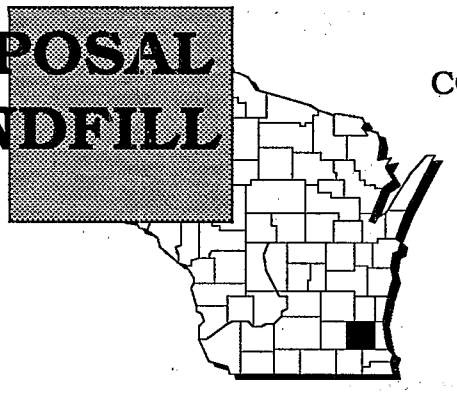
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Madison Metropolitan Sewerage Sludge District Lagoons site while investigations and cleanup activities are being planned.

MASTER DISPOSAL SERVICE LANDFILL

WISCONSIN

EPA ID# WID980820070



REGION 5
CONGRESSIONAL DIST. 09
Waukesha County
City of Brookfield

Site Description

Master Disposal Service, Inc. operated a 40-acre *landfill* on the western edge of Brookfield. The site was licensed by the State to receive wastes in 1977. From 1962 until early in 1982, the company filled a 26-acre *wetland* near the banks of the Fox River with over 1 1/2 million gallons of industrial wastes including solvents, paints, adhesives, oils, and foundry wastes. A ditch drains from the site into the Fox River. In addition to its landfill operations, the facility also began burning disposed material in 1966. No wastes have been accepted at the site for about 2 years. State sampling established that groundwater near the site is contaminated with heavy metals and *polychlorinated biphenyls* (PCBs). Approximately 5,000 people reside and depend on 10 municipal wells within 3 miles of the site for their potable water.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

The air and groundwater are contaminated with *volatile organic compounds* (VOCs) including benzene, toluene, and xylenes. The groundwater also is contaminated with heavy metals such as iron, manganese, and barium, as well as PCBs. Accidental ingestion, direct contact with, and inhalation of contaminated airborne dusts may be a potential health threat. The site is essentially a raised plateau in the middle of a marshy flood plain, which could be contaminated from site *runoff.*

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 potentially responsible party began an investigation to determine the nature and extent of contamination and to identify alternatives for site cleanup. The investigation is expected to be completed in late 1990. The EPA will review the results of the study and select the final cleanup strategy for the site.

Site Facts: In 1977, the State signed an agreement requiring Master Disposal Service to develop and implement a proper site abandonment plan.

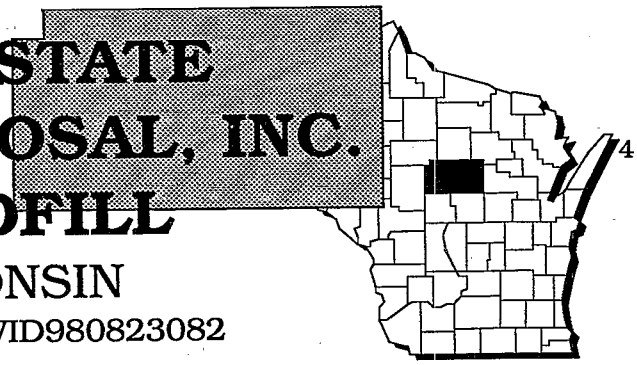
Environmental Progress

After listing the Master Disposal Service Landfill site on the NPL, the EPA 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 the final cleanup remedy are taking place.

MID-STATE DISPOSAL, INC. LANDFILL

WISCONSIN

EPA ID# WID980823082



REGION 5

CONGRESSIONAL DIST. 01

Marathon County

4 miles northeast of the Village of Stratford

Site Description

The Mid-State Disposal, Inc. Landfill (MSD) site is a 160-acre parcel of land located four miles northeast of Stratford and 18 miles southwest of Wausau. There are two *landfills* on the site, the 22-acre "Old Mound" landfill and the 5-acre "Interim Expansion" area, each covered with soil and vegetation. The site also contains a 3-acre *sludge lagoon* covered with soil and vegetation, and a former *leachate* pond area. MSD conducted landfilling operations from 1970 to 1979, receiving municipal, industrial, and commercial wastes as well as construction and demolition debris. Specific wastes received included paper mill sludges, asbestos dust, solvents, pesticides, paint sludges, and metals. Over the years, the covers of the Old Mound landfill, Interim Expansion area, and sludge lagoon have not been properly maintained. Numerous environmental problems and permit violations were noted by the Wisconsin Department of Natural Resources (WDNR) during a site inspection in 1974, while evaluating whether MSD was in compliance with the newly enacted State Solid Waste Disposal Regulations. In early 1977, the WDNR approved a plan to close the Old Mound landfill. Later that year, MSD was fined for improper *closure* of the landfill, and another order was issued. A leachate *containment* pond on the western edge of the site ruptured, releasing 150,000 to 200,000 gallons of leachate into Rock Creek during the late 1970s. In 1979, a lawsuit was filed by the State, ceasing operations at the site. The Weyerhaeuser Company, a *generator* of waste disposed at the facility, agreed to properly close the site in 1979. The pond leachate was removed, and the three waste disposal areas were covered. Leachate collection systems were installed in late 1979 for both the sludge lagoon and the interim expansion area; only the leachate collected from the latter has been removed and treated off site. The site is surrounded by abandoned railroad tracks; two sludge disposal lagoons owned by Weyerhaeuser, Inc. on the northeast; and private property on the east. Ten residences are located within a 1-mile radius of the site. Most land near the site is devoted to dairy and cash crop farming, though a few small businesses are scattered throughout the area. Surface water from west of the Old Mound landfill drains to an unnamed tributary of Rock Creek, and surface water from east of the Old Mound landfill drains to an unnamed tributary of the Big Eau Pleine River.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

continued

Threats and Contaminants

Several heavy metals and *volatile organic compounds* (VOCs) including benzene, vinyl chloride, and methylene chloride were detected in the groundwater. Leachate samples contained metals and VOCs above drinking water standards. On-site samples taken from the sludge lagoon, Interim Expansion area, and the Old Mound landfill were found to be contaminated with heavy metals. Samples containing VOCs were collected from the tributary to Rock Creek. Soil samples from an area along the western edge of the site were found to be contaminated with heavy metals, phthalates (plastic by-products), and dieldrin, a pesticide. One off-site sample taken near a tributary to Rock Creek contained iron and copper at concentrations exceeding Federal water quality standards designed to protect aquatic animals. Direct contact with and accidental ingestion of contaminated soil, surface water, groundwater, leachate, or *sediments* may pose risks to public health, and aquatic organisms. Nearby wildlife is potentially threatened by site contaminants.

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 1988, the EPA selected the following cleanup actions: (1) impose deed restrictions on the site to ensure that future site owners do not cause new releases from the site by building on or excavating soil from the site (restrictions also would be placed on large off-site groundwater withdrawals in the site vicinity to prevent the use of contaminated groundwater); (2) constructing a fence around the site to prevent potential trespassing; (3) reconstructing on-site roads to accommodate truck traffic during the cleanup; (4) groundwater, surface water, and residential well monitoring to evaluate the effectiveness of the cleanup actions; (5) landfill gas monitoring; (6) off-site groundwater monitoring; (7) provision of an alternate water supply for nearby residences; (8) improvement of surface water drainage; (9) leachate and ponded water collection and off-site treatment; (10) institutional controls to prevent well installation on site; and (11) solidifying sludge to reduce water content in it and *capping* the sludge lagoon to reduce rainfall *seepage* into the sludge lagoon. Under EPA monitoring, the parties potentially responsible for the site contamination began designing the cleanup remedies in late 1989. The actual cleanup work is scheduled to begin in 1991. The Mound and Interim areas also will be capped. The alternate water supply is scheduled to be installed in spring 1991.

Site Facts: In early 1980, a group of citizens filed suit against Mid-State Disposal, Inc., Weyerhaeuser, and the WDNR for past improper handling and disposal of hazardous waste at the site.

continued

Environmental Progress

After placing the site on the NPL, the EPA performed preliminary evaluations and determined that the site does not pose an imminent threat to the surrounding population or the environment while the design of final site remedies are being completed at the Mid-State Disposal, Inc. Landfill site.

MOSS-AMERICAN (KERR-MCGEE OIL CO.)

WISCONSIN

EPA ID# WID039052626

REGION 5

CONGRESSIONAL DIST. 04

Milwaukee County

Milwaukee

Alias:

Kerr McGee Chem. Corp. Forest Prod. Div.

Site Description

The 88-acre Moss-American site is located in northwestern Milwaukee. Operations at the site began in 1921, when the Moss Tie Company began to treat railroad ties with *creosote*, a wood preservative. The site operated from 1921 until 1976, when it was closed by Kerr-McGee, a former owner. During the facility's period of operation, liquid wastes were discharged to settling ponds that drained into the Little Menomonee River. Between 1963 and 1965, the Kerr-McGee Chemical Corporation purchased both companies and formed the Moss-American Company. Contamination at the site was first reported during the late 1960s. In 1971, several people received creosote-related chemical burns from wading in the Little Menomonee River. The EPA filed an injunction against Kerr-McGee in 1974, ordering the cleanup of contaminated river *sediments*. Following the site's closing in 1976, the EPA continued to investigate the site and gather evidence for its suit. The case, however, was dismissed in 1978 because of erroneous field data. Milwaukee County dropped its pending lawsuit against Kerr-McGee that same year in exchange for 65 acres of the site. Kerr-McGee sold the remaining 23 acres of the site to the Chicago and Northwestern Railroad Company in 1980. The site is surrounded by a mix of urban and rural uses. The railroad company now uses the parcel as an automobile loading and storage area. Total population within a 1-mile radius of the site is estimated at 9,500 people, all of whom depend on public wells. The Little Menomonee River crosses the site area and is used for recreational purposes.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

Groundwater samples have shown elevated levels of *volatile organic compounds* (VOCs) and *polycyclic aromatic hydrocarbons* (PAHs). Free-standing creosote or an oil sheen was observed in 3 monitoring well samples; similar observations were noted in 8 test pits. The primary contaminants detected in the river sediments are PAHs. Contaminants found in the soil in the processing area and vicinity, the treated wood storage area, and the northeast and southeast *landfills* include PAHs and BTX compounds, both components of creosote. PAHs were detected in a ditch that drains water from the site to the river. The Little Menomonee River has been negatively impacted by surface water *runoff* and sediment from the site. Potential health risks may exist for individuals inhaling volatilized chemicals or ingesting or making direct contact with the contaminated sediments, soil, groundwater, or surface water.

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: Contaminated sediment along 1,700 feet of the riverbed adjacent to the site was excavated and landfilled near the northeastern corner of the site. In 1973, the EPA financed the dredging of approximately 5,000 feet of the river. The plant facilities were demolished in 1978, and some oil-saturated soil was excavated and shipped to the Nuclear Engineering Landfill in Sheffield, Illinois.

Entire Site: The EPA completed an investigation in May 1990 to: (1) identify the key physical features of the site; (2) locate on-site sources of creosote and other contaminants or hazardous wastes; (3) determine the extent of contaminated soil, groundwater, and river sediment; (4) identify and evaluate the potential pathways for contaminant movement; and (5) estimate the potential short- and long-term hazards to the public health and the environment. The proposed alternative for site cleanup involves *bioremediation* of soils and river sediments and groundwater treatment. The EPA is now awaiting public comments on the proposed plan before making final cleanup selections.

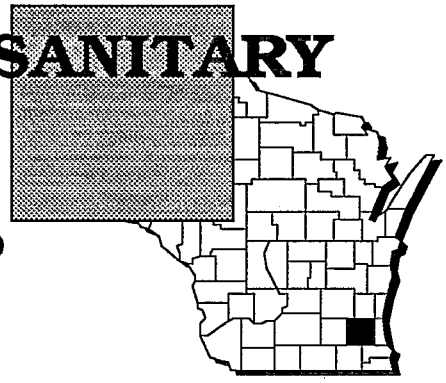
Environmental Progress

By removing contaminated sediment from the Little Menomonee River, the EPA has reduced the potential for exposure to hazardous materials in the river while the final cleanup remedies are being planned.

MUSKEGO SANITARY LANDFILL

WISCONSIN

EPA ID# WID000713180



REGION 5

CONGRESSIONAL DIST. 09

Waukesha County

Muskego

Alias:
Wauer Landfill

Site Description

The 56-acre Muskego Sanitary Landfill site is a former rendering plant with associated wastewater *lagoons* located northeast of the site. The site is defined by two areas known as the old fill and the southeast fill. Prior to *landfill* operations, the site was run as a farm by the Alfred Wauer family. The Wauers, who also ran the off-site animal rendering plant and associated waste lagoons, used an inactive sand and gravel pit located on the farm for the disposal of animal carcasses and blood. The quarry pit evolved into an open dump, and in 1954, Mr. Wauer obtained a permit from the City of Muskego. The old fill was operated as a public dumping ground. During the 1960s, the Wauers allegedly accepted waste oils and paint products as part of a drum salvage operation. The drums were emptied at or near the old fill and their contents were burned in open fires. The drums were then reclaimed and resold. In 1969, Acme Disposal, a subsidiary of Waste Management of Wisconsin, Inc. (WMWI), leased the property and continued operations at the dump. The old fill was licensed by the Wisconsin Department of Natural Resources (WDNR) in 1971 as a sanitary landfill. By 1976, the landfill had been renamed the Muskego Sanitary Landfill and was operated directly by WMWI. In 1975, the WDNR determined that the quality of groundwater was deteriorating in the vicinity of the site and subsequently ordered WMWI to *cap* and close the old fill. The southeast fill was approved as a sanitary landfill by the WDNR in 1977 and remained active until it was filled to capacity and closed in 1981. Groundwater contamination was discovered in 1982 when the WDNR reviewed data in its response to a request from WMWI for approval to do repair work on both fill areas. The Town of Waukesha, with a population of 51,000, is to the east of the landfill. The Fox River and associated *wetlands* are in the area.

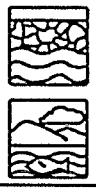
Site Responsibility: This site is being addressed through Federal, State, and *potentially responsible parties'* actions.

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants



Groundwater underlying the site has been shown to be contaminated with *volatile organic compounds* (VOCs) and heavy metals including lead and chromium. Potential health risks may exist for individuals who drink the contaminated groundwater. The wetlands also may be threatened.

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 1982, the WDNR found elevated levels of contaminants in four residential wells. The four affected homes were purchased by WMWI. In 1985, the City of Muskego created a public water utility and constructed a system to serve area homes that may be using contaminated wells.

Entire Site: Approximately 19,820 pounds of liquid solvents and 1,735 tons of contaminated soil and old drums are planned to be removed from the site by the potentially responsible parties in 1990. Under EPA monitoring, WMWI initiated an investigation in 1987 to determine the nature and extent of contamination at the site and to identify alternative cleanup methods. The investigation is scheduled to be completed in late 1990. The EPA will evaluate the study findings and select the final cleanup strategy for site contamination.

Site Facts: WMWI entered into an agreement to finance and conduct the investigation at the site. The *Administrative Order* was signed in 1987 by WMWI, the EPA, and the WDNR.

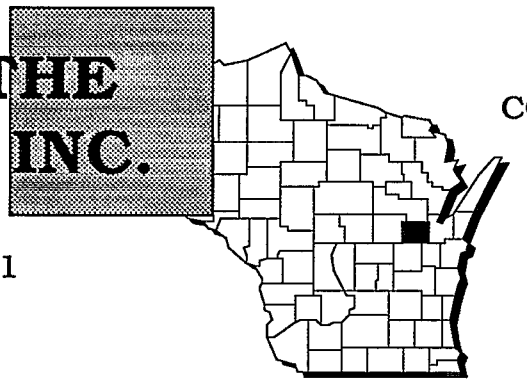
Environmental Progress

The purchase of the four homes with contaminated wells and construction of a public water supply have reduced the potential for exposure to contaminated groundwater while site studies are being conducted and cleanup activities are being planned at the Muskego Sanitary Landfill site.

N. W. MAUTHE COMPANY, INC.

WISCONSIN

EPA ID# WID083290981



REGION 5

CONGRESSIONAL DIST. 08

Outagamie County

Appleton

Site Description

The 2-acre N. W. Mauthe Company, Inc. site operated as a chromium electroplating facility from 1946 to 1976. The building was leased during this time by Wisconsin Chromium Corporation. Norbert Mauthe owned the facility from 1966 to 1976, when he sold it to Southern Plating. Southern Plating only used the building for storage. The facility was a *generator* of hazardous waste, which has severely contaminated the site with chromium. The chromium leaked through the floor and from a vent directly onto the ground. The EPA conducted tests in 1985 and detected chromium and *volatile organic chemicals* (VOCs) in the soil and groundwater. In 1982, contaminated groundwater from the site entered the basement of a home and was discharged to storm sewers that lead to the Fox River, 1/2 mile from the site. The river drains into Lake Winnebago, which provides drinking water to 60,000 people. The river flows toward the City of Green Bay and empties into the Green Bay. Approximately 11,000 people obtain drinking water from public and private wells within 3 miles of the site.

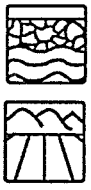
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/31/89

Threats and Contaminants



Groundwater and soils contain various VOCs and heavy metals including chromium. People who touch or accidentally ingest contaminated groundwater or soil may be at risk. If contaminants *leach* into the river or lake, 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

Initial Actions: In 1982, the State installed a system to collect shallow groundwater to prevent puddles from forming. A portion of the site was covered with asphalt to limit rainwater from coming into contact with the soil.

Entire Site: The State has begun an investigation to determine the extent of groundwater and soil contamination at the site. Once this investigation is completed in 1991, the EPA will review the recommended measures for site cleanup and select the final strategy to address site contamination.

Environmental Progress

Installing a shallow groundwater collection system and paving a portion of the site with asphalt have reduced the threat of public exposure to contaminants from the N.W. Mauthe Company, Inc. site while studies are under way and cleanup activities are being planned.

NATIONAL PRESTO INDUSTRIES, INC.

WISCONSIN

EPA ID# WID006196174

REGION 5
CONGRESSIONAL DIST. 03
Eau Claire County
Eau Claire

Site Description

The 325-acre National Presto Industries (NPI) site was originally owned by the U.S. Government and operated as a small arms loading plant and manufacturing facility for radar tubes during the 1940s. NPI purchased the property in 1947 and has maintained sole ownership of the facility. From 1948 until 1954, NPI manufactured consumer goods. During this same period, the facility also was used for defense-related activities including the manufacturing of fuses for the Army and parts for military aircraft. Since 1954, NPI has dedicated the plant for the production of projectile metal parts under contracts with the Army. The company ceased operations at the facility by 1980. While the facility is currently inactive, it is maintained in a state of readiness by the Army. Wastewater generated at the facility was originally discharged to seven on-site *seepage pits*. By 1952, the seepage pits could no longer handle the high volume of water flow from the plant, and the wastewater was pumped to a former sand and gravel pit, which may have been used as a disposal area before 1948. From 1967 to 1969, wastewater *lagoons* were constructed to provide additional treatment and disposal capacity. Up to 2 1/2 million gallons of wastewater were discharged into the lagoons each day. *Volatile organic compounds* (VOCs) were disposed of in one of the lagoons and in an area northeast of the plant known as the Melby Road site from 1967 to 1969. In 1986, an additional disposal area was discovered on the eastern end of the NPI property line, following a complaint to the Wisconsin Department of Natural Resources (WDNR). Drums containing a variety of waste materials were found and later removed and stored on an unused loading dock at the plant by NPI. The City of Eau Claire has a population of 51,500 people. All nearby residences use private wells. The Eau Claire municipal well field is within 3 miles of the site.

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

NPL LISTING HISTORY
Proposed Date: 10/15/84
Final Date: 06/10/86

Threats and Contaminants

Groundwater and soils are contaminated with various VOCs and heavy metals. Low levels of VOCs were detected in Lake Hallie, approximately 1 mile north of the site. Potential health threats include accidentally ingesting or touching contaminated soil or groundwater. Access to the main plant area is restricted by fencing and is checked by security guards throughout the day and night. Access to the remainder of the site is not restricted, although much of the site is surrounded by a fence.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two *long-term remedial phases* focusing on cleanup of the entire site and selection of a permanent water supply.

Response Action Status

Immediate Actions: NPI is providing bottled water to the Town of Hallie residents. Bottled water is being distributed to homes and businesses with contaminated wells and those that may be threatened with contamination by VOCs from the site. Fences have been erected to restrict access to the main plant areas.

Entire Site: Under EPA monitoring, NPI initiated an investigation in 1986 to determine the type and extent of contamination at the site. The EPA and the WDNR ordered NPI to distribute bottled water and initiate a study to identify and evaluate alternatives for a permanent water supply. The company also was ordered to initiate a study to identify and evaluate cleanup alternatives for control of the contamination source at the Melby Road site and East Disposal Area. Completion of the studies is scheduled for 1991.

Permanent Water Supply: Under EPA monitoring, NPI conducted a study to identify and evaluate alternatives for a permanent, uncontaminated drinking water supply for the area. The recommended remedy is for the City of Eau Claire to supply water to its residents in the affected area through water line hookups; a decision by the EPA is expected in 1990.

Site Facts: In 1986, NPI signed a *Consent Order* with the EPA and the State to conduct an investigation to determine the nature and extent of contamination at the site and to identify alternative cleanup remedies. A *Unilateral Order* was issued in 1989 for bottled water to be distributed to affected residents.

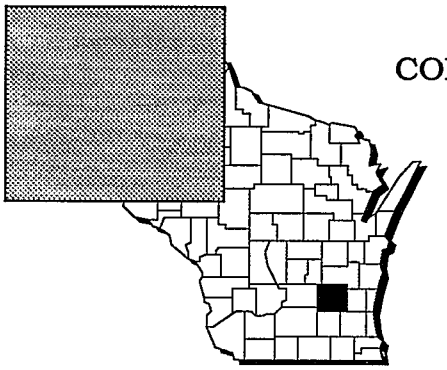
Environmental Progress

Providing bottled water to those affected by site contaminants has eliminated the potential for exposure of the surrounding community to hazardous substances in the drinking water and will continue to protect residents near the National Presto Industries, Inc. site until final cleanup activities are initiated.

NORTHERN ENGRAVING COMPANY

WISCONSIN

EPA ID# WID006183826



REGION 5

CONGRESSIONAL DIST. 03

Monroe County

Sparta

Site Description

The Northern Engraving Corporation (NEC) owns and operates a manufacturing facility at this site. The company produces metal nameplates, dials, and decorative trim for the auto industry. Four separate areas of contamination at the NEC facility have been identified including the *sludge lagoon, seepage pit,* sludge dump site, and lagoon drainage ditch. The contaminants found in these areas are from past wastewater treatment and disposal practices used at the site. Since the 1960s, wastewaters and by-products of the metal finishing process have been treated on site. An on-site wastewater treatment lagoon was installed in 1967. Rinse water from the plant was collected and treated with sodium hydroxide for precipitation to metal hydroxide solids. The treated rinse water was discharged to the sludge lagoon to allow solids to settle. The treated lagoon *effluent* was discharged to the LaCrosse River by way of a storm drainage ditch. Between 1968 and 1976, the sludge lagoon accumulated solids from the treated wastewater. On two occasions, sludge was removed from the lagoon and *landfilled* in an on-site dump area. The sludge lagoon was eventually removed from service in 1980, and an on-site seepage pit was used to neutralize spent *acid* waste. The pit was removed from service, filled with clean material, and graded in 1981. A new aboveground wastewater treatment system was installed in 1976 and modified in 1984. The nearby LaCrosse River is used for recreational activities.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

The on-site drainage ditch was contaminated with *trichloroethylene* (TCE) from metal finishing wastes. Groundwater and sludge were contaminated with heavy metals including copper, chromium, iron, zinc, nickel, and fluoride. Site cleanup has eliminated the potential for health risks.

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 1988, under EPA monitoring, the parties potentially responsible for the contamination excavated and solidified approximately 4,400 cubic yards of sludge and soil, installed a cover over the lagoon to prevent further site contamination, imposed access and deed restrictions to the seepage pit property, and implemented groundwater monitoring. A full year of groundwater sampling has been completed, and results indicate that contamination levels have been reduced as a result of the surface cleanup; further groundwater monitoring will continue.

Site Facts: A *Consent Decree* was signed by the potentially responsible parties and the EPA, under which the company was to conduct site cleanup activities.

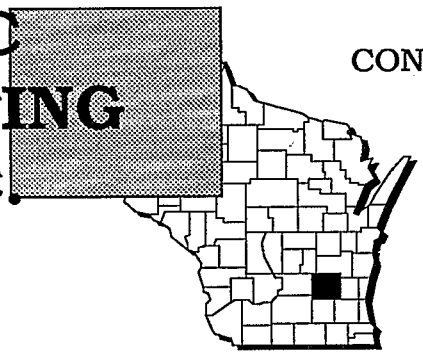
Environmental Progress

The removal activities described above have addressed surface wastes and contaminated material and halted further groundwater impacts. The goals for cleanup of the Northern Engraving Company site have been fully achieved and the site no longer poses a threat to human health or the environment. No further cleanup activities are required at the site; however, groundwater monitoring will continue to ensure the long-term effectiveness of the remedies.

OCONOMOWOC ELECTROPLATING COMPANY, INC.

WISCONSIN

EPA ID# WID006100275



REGION 5

CONGRESSIONAL DIST. 09

Dodge County

Ashippin

Site Description

The 5-acre Oconomowoc Electroplating Company, Inc. site is adjacent to 300 acres of *wetlands*. The shop has been in operation since 1957, using heavy metals in electroplating operations. The wastes generated from the process were discharged into the adjacent wetland. *Degreasing* operations were also performed in conjunction with the process. In 1972, the company built two unlined settling *lagoons* to increase wastewater treatment capacity. *Sludges* have accumulated in the lagoons and may have been removed throughout the 1970s. During this time, the company constructed a wastewater treatment plant. Inefficient operation of the lagoons and the treatment plant, as well as discharges of untreated wastewater, have resulted in an accumulation of metal sludge in a wetland adjacent to Davy Creek, a tributary to the Rock River 1 mile downstream of the site. Plant operations also may have contaminated the groundwater in the area. Plating wastes have eaten through the concrete waste troughs in the plant floor and also have *seeped* out of the ground near the plant walls. Drums of wastes are leaking on site and sludges have spilled from lagoon *impoundments*. Approximately 1,400 people live within 3 miles of the site. The nearest house is 150 feet from the site.

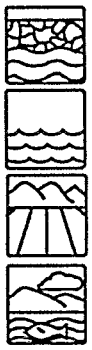
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants



The groundwater is contaminated with heavy metals, cyanide, and *volatile organic compounds* (VOCs) from electroplating activities. The *sediment* and surface water are contaminated with heavy metals including arsenic, cadmium, copper, and lead. The soil is contaminated with heavy metals including aluminum, cadmium, copper, arsenic, calcium, iron, lead, nickel, and manganese. Metal sludges have accumulated in the wetlands. Accidentally ingesting or touching the contaminated soil, groundwater, and sediments may cause a potential health threat.

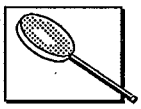
continued

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

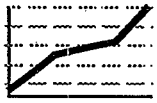
Immediate Action: In 1987, the EPA installed a fence around the entire site to restrict access.



Entire Site: In 1987, the EPA began an investigation into the extent of contamination and alternative remedies that could be used to clean up the site. Completion of the investigation is scheduled for late 1990. At that time, the EPA will review the study findings and select the final strategy for cleanup of the site contamination.

Site Facts: In 1981, the State ordered the company to restrict its discharge of heavy metals into the wetlands.

Environmental Progress

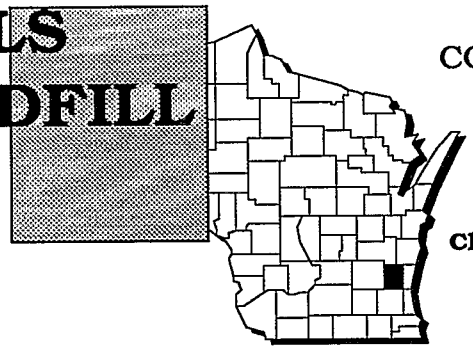


The fencing of the site has greatly reduced the potential for exposure to contaminated materials at the Oconomowoc Electroplating Company, Inc. site while investigations are taking place and cleanup activities are being planned.

OMEGA HILLS NORTH LANDFILL

WISCONSIN

EPA ID# WID000808568



REGION 5

CONGRESSIONAL DIST. 09

Washington County

Germantown

Aliases:

Germantown Landfill 1

Chem. Waste Mgmt. of Wisconsin

Lauer Landfill II

Site Description

The Omega Hills North Landfill Site covers 83 acres in the extreme southeastern part of Wisconsin, near metropolitan Milwaukee. The State of Wisconsin licensed this *landfill* to accept hazardous wastes from 1977 to 1982. The facility accepted about 5,000 tons of hazardous waste each year, compared to the 2,000 tons of non-hazardous waste the facility now accepts. The State estimates there are over 150,000 cubic yards of waste now on the site. This estimate includes 3,300 cubic yards of heavy metals and 350 cubic yards of solvents. Large amounts of asbestos have been and still are being disposed of at the site. More than 15 million gallons of liquid wastes were disposed of at this site each year until it stopped accepting such wastes; this includes an estimated 6 million gallons of hazardous liquid waste. The site stopped accepting hazardous wastes in 1982 and liquid wastes in 1983. About 250 Wisconsin industries have used the site for hazardous waste disposal. The facility was originally built below the level of groundwater under the site. This allows *leachate* to flow away from the landfill and into an extensive network that collects the waste material before it reaches the groundwater. However, the system for collecting leachate has not operated as it was designed, which resulted in 200 million gallons of liquid waste accumulating under the site. Approximately 42,000 people live within a 3-mile radius of the site. There are 874 private wells within 3 miles of the site. The nearest municipal well is 1 1/2 miles away, and the nearest residences are 150 yards from the site. Several office buildings are located within 100 yards of the site.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

Leachate has been *migrating* from the site and has contaminated the shallow groundwater under several private wells in the area with *volatile organic compounds* (VOCs) including benzenes, toluene, and vinyl chloride. Leachate contains heavy metals such as zinc, nickel, arsenic, and cadmium, as well as phthalates and VOCs including *trichloroethylene* (TCE). Leachate on site also contains cyanide, gases, *petrochemicals*, and pesticides. Surface water in off-site streams contains VOCs. People could be exposed to hazardous chemicals from the site by drinking contaminated groundwater, eating crops grown with contaminated water or soil, or by inhaling contaminated dust particles. Dairy farms and orchards are adjacent to the site, and crops such as corn, soybeans, and apples could be contaminated if they are irrigated with contaminated groundwater.

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: Currently, a number of low fences surround the site, and signs have been posted warning people not to trespass onto the landfill property. The site is closed and covered with clay. Under state monitoring, the owner of the site installed additional perimeter *slurry* or compacted clay cut-off walls and systems to collect leachate, preventing it from entering the groundwater under the site. The owner also installed a pre-treatment plant for the leachate and more devices to intercept and collect gases that escape from the landfill.

Entire Site: The State is now studying the site to determine more clearly the nature and extent of contamination at the site. Once the investigation has been completed and all site contamination has been identified, the State and the EPA will select the final cleanup strategy for the site.

Site Facts: In 1984, the owner of the site entered into a stipulated agreement with the State to decrease the levels of leachate under the site. The State closed the facility in 1989.

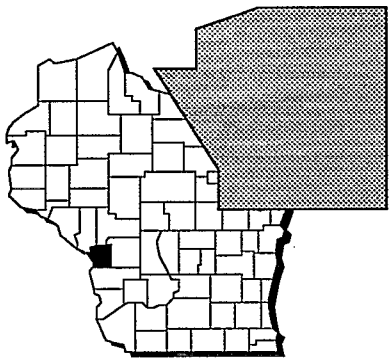
Environmental Progress

Collecting and treating leachate, fencing the site, and the other immediate actions described above have substantially reduced exposure to contaminants while investigations leading to the selection of final remedies are taking place.

ONALASKA MUNICIPAL LANDFILL

WISCONSIN

EPA ID# WID980821656



REGION 5
CONGRESSIONAL DIST. 03
LaCrosse County
Onalsska

Site Description

The Onalaska Municipal Landfill covers 7 acres of an 11-acre parcel located in a rural, agricultural area near homes and a sportsman's club. The *landfill* area was originally mined as a sand and gravel quarry in the early 1960s. From 1969 to 1980, the Town of Onalaska was licensed to operate a municipal landfill at the former quarry. Municipal trash and industrial chemical wastes including naphtha, toluene, and paint residues were disposed of at the site. Open burning was also carried out until 1971, when the Wisconsin Department of Natural Resources (WDNR) banned this practice after it received complaints of heavy smoke and odors. After 1971, barrels containing waste were emptied into pre-excavated holes, and, occasionally, full barrels were buried. In one case, 300 barrels were buried, and in another case, a 500-gallon tank truck partially filled with paint residues was buried at the site. The EPA estimates that the equivalent of 2,500 drums of liquid wastes were disposed of at the site. The WDNR closed the landfill in 1980. The closest residence is within 300 feet of the site, and the population within a 1-mile radius is 320. The nearby Black River is a major recreational resource for residents in the surrounding area.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

Groundwater contains *volatile organic compounds* (VOCs) including *trichloroethylene* (TCE) and toluene, naphtha, and barium. The groundwater in the sand and gravel *aquifer* below the site is believed to be in contact with the buried waste at least part of the time during a normal year. Chemicals in the landfill are *leaching* into the groundwater, which may eventually reach an adjacent *wetlands* area and the nearby Black River. People could be exposed to contaminants from the site by drinking contaminated groundwater and by breathing in vapors that escape from contaminated groundwater when used for washing and showering. Groundwater flows from the site into the upper Mississippi River Wildlife Refuge, which also borders the Black River and Lake Onalaska. Contaminated *runoff* from the site could affect these surface waters, as well as the aquatic plants and animals and wildlife residing in these areas.

continued

Cleanup Approach

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

Response Action Status

Initial Actions: The Town of Onalaska placed a clay *cap* over the landfill in 1982 to prevent *seepage* from spreading contaminants. A residential well was replaced due to contamination that exceeded the Federal drinking water and State groundwater quality standards.

Entire Site: The EPA began studying the nature and extent of contamination at the site in 1988. The field work includes sampling of groundwater, soil, surface water, and *sediments*. The geology and groundwater of the site also are being evaluated. The EPA will use the results of the field studies to consider various technologies that will address contamination at the site, with recommendations planned for 1990.

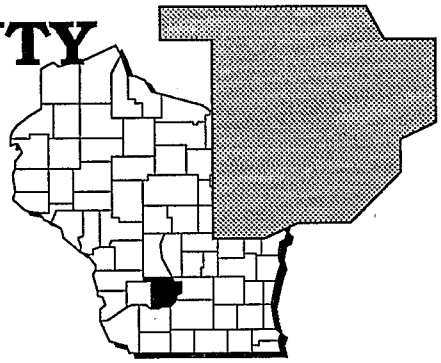
Environmental Progress

By placing a cover over the landfill, the possibility of direct contact with hazardous materials has been virtually eliminated while investigations are being conducted and cleanup activities for the Onalaska Landfill site are being planned.

SAUK COUNTY LANDFILL

WISCONSIN

EPA ID# WID980610141



REGION 5

CONGRESSIONAL DIST. 02

Sauk County

10 miles west of Baraboo

Site Description

The 10-acre Sauk County Landfill site operated as a *landfill*, accepting municipal and foundry wastes. In 1973, the County received a permit from the State to accept municipal waste, which was hauled in from several small municipalities and placed on the site until 1983. The landfill also accepted foundry wastes from Grede Foundry, Inc. Foundry sand formed *berms* within the landfill area. An estimated 2% of the wastes were baghouse dusts containing lead and cadmium. The landfill was closed in 1983, and clay was placed on the top and sides of the facility. An EPA inspection in 1985 led to the discovery that methane gas is being generated from site wastes and that *volatile organic compounds* (VOCs) and metals are present in on-site monitoring wells. Approximately 900 people obtain drinking water from private wells within 3 miles of the site.

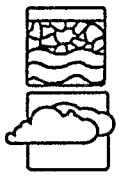
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

Threats and Contaminants



Groundwater is contaminated with the VOCs toluene and benzene and heavy metals including arsenic, chromium, and barium. The greatest potential health threat to people is drinking contaminated groundwater or inhaling vapors from the groundwater. Inhaling air contaminated with methane gas is also a potential health threat.

Cleanup Approach

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

Response Action Status

Initial Actions: When the landfill was closed in 1983, clay was placed over it to prevent water from entering the landfill.

Entire Site: The State, under EPA monitoring, will begin an investigation into the nature and extent of soil, groundwater, and other contamination at the site in late 1990. The investigation will define the contaminants of concern and will recommend alternatives for the final site cleanup. The investigation is planned to be completed in 1993.

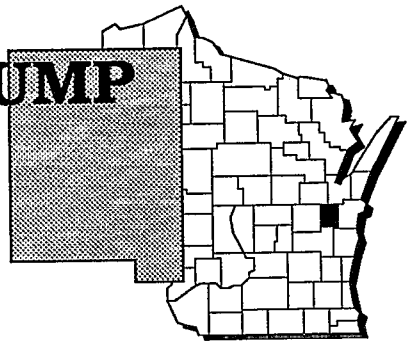
Environmental Progress

By initially covering the landfill with clay, the potential for hazardous materials moving into the groundwater or the surrounding area has been greatly reduced while investigations leading to the final selection of cleanup remedies are under way.

SCHMALZ DUMP

WISCONSIN

EPA ID# WID980820096



REGION 5

CONGRESSIONAL DIST. 06

Calumet County

Town of Harrison

Site Description

The 7-acre Schmalz Dump site is located on the northern shore of Lake Winnebago and was the location of unauthorized industrial dumping during the 1960s and 1970s. The previous site owner began filling the property in 1968. Records show that the wastes disposed of included car bodies, stone, trees, pulp chips, mash, *fly ash*, bottom ash, and demolition debris. Adjacent property to the north and west of the site also was used for waste disposal. Reportedly, these wastes included ashes and a white *sludge*. Evidently, garbage was deposited in a marshy area that once existed immediately beyond the southern property line. In 1972 and 1973, the site accepted fly ash and bottom ash from a utility company. In 1978 and 1979, the site accepted *polychlorinated biphenyl* (PCB)-contaminated building demolition debris that was later used to fill a *wetland* area. In 1979, in response to residents' complaints, the State ordered the transportation of demolition materials to the site to cease. There are about 60 residences and businesses within 1,000 feet of the property, and the site is about 500 feet from Lake Winnebago, a source of public water supply. All water users in the area are connected to the Menash water system, although some have retained wells for auxiliary purposes. The neighboring city of Appleton, with a population of 60,000, has its drinking water *intake* approximately 1,200 feet from the shore of Lake Winnebago. The present property owner intends to convert the property into a residential development.

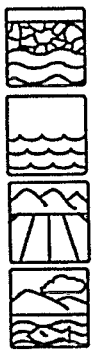
Site Responsibility: This site is being addressed through Federal and *potentially responsible parties'* actions.

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants



Groundwater was contaminated with heavy metals including lead and chromium. *Sediment* and surface water samples collected from a pond near the disposal area and from the drainage ditches leading into the pond indicate the presence of PCBs, *polycyclic aromatic hydrocarbons* (PAHs), and heavy metals. Soil was contaminated with heavy metals, PCBs, and PAHs. Potential health threats to people include drinking contaminated surface water and coming into direct contact with contaminated sediments. Eating contaminated fish from the polluted waters could also present a health threat.

continued

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: In 1985, the EPA constructed a 6-foot high security fence and warning signs around the entire site boundary to restrict access. More than 4,500 cubic yards of PCB-contaminated materials have been removed.

Entire Site: The cleanup activities at the site have been divided into two parts. The first part, involving the excavation and off-site disposal of 3,500 cubic yards of PCB-contaminated debris and sediment, was completed in 1989. The second part of the cleanup primarily involves the treatment of contaminated water. The selected cleanup technologies include: (1) installation of a soil *cap* to *contain* the contaminated soil and debris; (2) operation and maintenance of a groundwater monitoring program; and (3) implementation of a voluntary well abandonment program for nearby wells. The EPA is preparing the technical specifications and design for the long-term cleanup action. The cleanup activities will begin once the design phase is completed in late 1990.

Site Facts: In 1989, the EPA and one of the eight parties potentially responsible for the site contamination reached a settlement wherein the party agreed to pay for site cleanup activities.

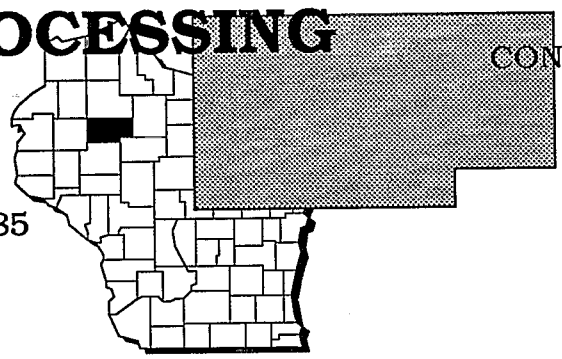
Environmental Progress

Much of the contaminated material has been removed from the Schmalz Dump site and has been disposed of at a federally approved facility. To date, completed cleanup actions have achieved site goals for soil and surface water contamination at the site. Therefore, no further cleanup actions related to soil or surface water are needed. These actions, along with the construction of a security fence surrounding the site, have greatly reduced the potential for exposure to hazardous materials while the technical specifications and design are being completed for the long-term groundwater cleanup of the entire site.

SCRAP PROCESSING CO., INC.

WISCONSIN

EPA ID# WID046536785



REGION 5
CONGRESSIONAL DIST. 07
Taylor County
Medford

Site Description

The 2-acre Scrap Processing Co. site, located approximately 1 mile northwest of Medford, currently operates as a gas station and salvage yard. From 1955 until 1974, the company cracked lead and *acid* batteries to reclaim the lead that was smelted on site. During the battery crushing operation, the equivalent of 399,000 gallons of acid wastes contaminated with heavy metals from the batteries ran from the crushing area, along an unlined ditch, into an unlined pond. The pond has intermittently overflowed into the Black River, located along one side of the site, contaminating it with heavy metals and acid. Old cars, car parts, and other materials commonly found in scrap yards are present on the site. A company that manufactures machine parts is located next to the scrap yard. The building that was used for battery cracking is still standing and is located on the western end of the site. The site is bordered by a residential area, a few older homes, and a mobile home park. Two of the older homes across the street from the site use private wells. The residents in the subdivision to the east of the site and people in the mobile home park use water from Medford municipal wells. One of these municipal wells is located directly across the river and downstream from the site. Reportedly, this particular well, and a few others in the area surrounding the site, are no longer in use. Fishing is common along the river, and several parks are located along the western side of the river, across from the site.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

Groundwater, soils, and *sediments* are contaminated with heavy metals including lead, barium, copper, and zinc. Elevated levels of *polychlorinated biphenyls* (PCBs) were also found in soil samples. Surface water in the on-site pond and at the point of entry into the Black River is contaminated with heavy metals and acids. Potential health threats to people include drinking, accidental ingestion, and coming in direct contact with contaminated sediment, soil, surface water, and groundwater. The main contaminant of concern at this site is lead, to which pregnant women and children are highly sensitive.

continued

Cleanup Approach

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

Response Action Status

Initial Actions: In 1984, the potentially responsible party drained the unlined pond and disposed of the liquid in the municipal storm sewer. A total of 7,200 gallons of water from the pond were transported to a manhole in the city park that is located on the eastern side of the river. The first 6 inches of lead-contaminated soil and sediment were excavated and hauled away for off-site disposal at a hazardous waste landfill. Remaining contaminated soil was classified as solid waste and was disposed of at the Medford Municipal Landfill. Excavation and removal of wastes were completed in 1986.

Entire Site: The EPA is planning to begin an investigation into the nature and extent of remaining contamination at the site in 1991. The investigation will define the contaminants of concern and will recommend alternatives for the final cleanup. The investigation is planned to be completed in 1993.

Site Facts: In 1983, the State brought an enforcement action against Scrap Processing, the party potentially responsible for the site contamination, which resulted in the company being ordered to perform initial cleanup actions at the site.

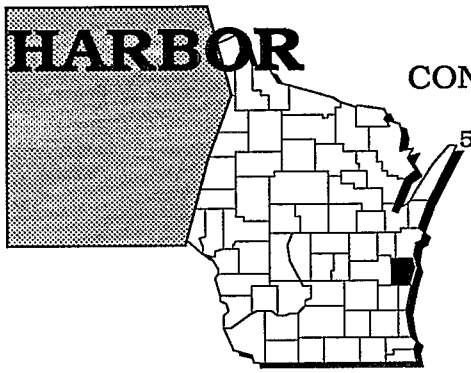
Environmental Progress

Much of the contaminated materials, including soil and liquids, have been excavated and properly disposed of away from the site, significantly reducing the potential of exposure to hazardous materials. Investigations leading to the selection of a final cleanup remedy for the remaining site contamination currently are being planned.

SHEBOYGAN HARBOR & RIVER

WISCONSIN

EPA ID# WID980996367



REGION 5
CONGRESSIONAL DIST. 06
Sheboygan County
55 miles north of Milwaukee

Site Description

The Sheboygan Harbor & River site extends approximately 14 miles through the communities of Sheboygan Falls, Kohler, and Sheboygan. The site area includes Sheboygan Harbor, located on Lake Michigan, and the lower Sheboygan River, which discharges into the Sheboygan Harbor. In 1977, the State detected *polychlorinated biphenyls* (PCBs) during routine sampling of fish. Since then, PCBs have been detected in fish, wildlife, surface water, and *sediments* in the harbor and river. The highest concentrations of PCBs have been detected in sediments immediately downstream from a die-casting plant in Sheboygan Falls. Concentrations decline farther downstream from the plant. Tecumseh Products Company excavated contaminated soils from its property along the river and disposed of them off site in 1978. The Sheboygan River drains into Lake Michigan, the source of drinking water for approximately 58,000 people within the Sheboygan/Sheboygan Falls/Kohler metropolitan area. The EPA has detected PCBs in sediments within 1 mile of the drinking water *intakes*. Both the Sheboygan Harbor and River are 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: 06/10/86

Threats and Contaminants

Sediments are contaminated with PCBs, a wide variety of heavy metals, *volatile organic compounds* (VOCs), *polycyclic aromatic hydrocarbons* (PAHs), and phthalates. Soils and surface water are contaminated with PCBs and heavy metals including arsenic, chromium, copper, lead, and zinc. People who touch or accidentally ingest contaminated soil, sediments, or surface water may be at risk. Because fish and wildlife are contaminated with PCBs, people who eat contaminated fish or waterfowl also may suffer adverse health effects. In 1978, the State advised residents not to eat fish from the Sheboygan River and two tributaries, the Mullet and Onion Rivers, because of PCB contamination. In 1987, the State also issued an advisory not to eat wildlife from the area. The advisories are still in effect.

continued

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: Tecumseh Products Company, Inc. began an investigation in 1986 to determine the nature and extent of site contamination. The investigation is assessing risks to human health and the environment and will result in the evaluation of potential cleanup alternatives. The investigation has included sediment sampling of the river and harbor, floodplain soil sampling, and river and harbor water sampling. Tecumseh is conducting an alternative investigation to test and evaluate potential cleanup technologies that may be used in treating PCB-contaminated sediments. A Confined Treatment Facility was built on site and is being used to study the effectiveness of enhanced biodegradation for the treatment of PCBs in sediments. Investigations are scheduled to be completed in late 1991.

Site Facts: In 1986, the EPA and the State signed a *Consent Order* with Tecumseh Products, requiring the company to conduct an investigation at the site.

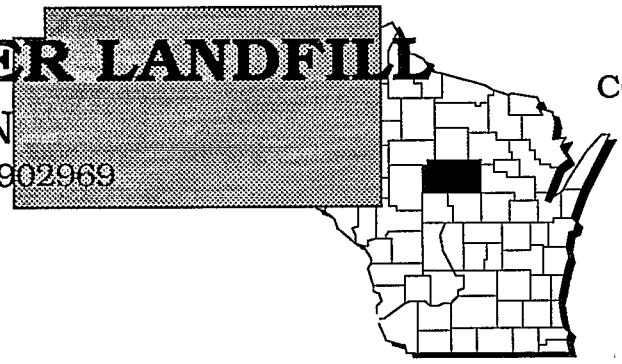
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Sheboygan Harbor & River site while investigations are taking place and cleanup activities are being planned.

SPICKLER LANDFILL

WISCONSIN

EPA ID# WID980902969



REGION 5

CONGRESSIONAL DIST. 07

Marathon County

Spencer

Site Description

The 80-acre Spickler Landfill site is a former *landfill* now used as a tree nursery. The landfill began operations under private ownership in 1970, disposing of both municipal and industrial wastes. The facility was sold to Mid-State Disposal, Inc., which operated the facility from 1972 to 1973. In 1975, Mid-State Disposal sold the site back to the original owner, who subsequently resold the property in 1976 to the present owner. The landfill received municipal waste and asbestos dust at a time when the landfill had no liner or *leachate* controls. The area was subsequently *capped* with clay. In 1971, with State approval, approximately 1,280 cubic yards of mercury *sludge* were deposited at the site in a clay-lined pit. Later that year, the pit was capped with clay. The landfill closed in 1976. A site inspection in 1984 led the EPA to observe that the pit had subsided and water had ponded on top. Leachate was *seeping* into a ditch adjacent to the site, threatening local surface water. Approximately 75 people live within 1 mile of the site, and an undetermined number of private wells are located within 1/4 mile. The sandstone *aquifer* provides drinking water to private wells serving 2,000 people 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: 01/22/87

Final Date: 07/21/87

Threats and Contaminants

Groundwater in both the upper and lower aquifers is contaminated with heavy metals including mercury and barium, as well as *volatile organic compounds* (VOCs) including toluene. Potential health threats to people include drinking or touching contaminated groundwater.

Cleanup Approach

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

continued

Response Action Status

Entire Site: The potentially responsible parties, BASF and Weyerhaeuser, currently are conducting an investigation into the nature and extent of site contamination, under EPA monitoring. The investigation will define the contaminants and recommend alternatives for the final cleanup. The investigation is planned to be completed in late 1991.

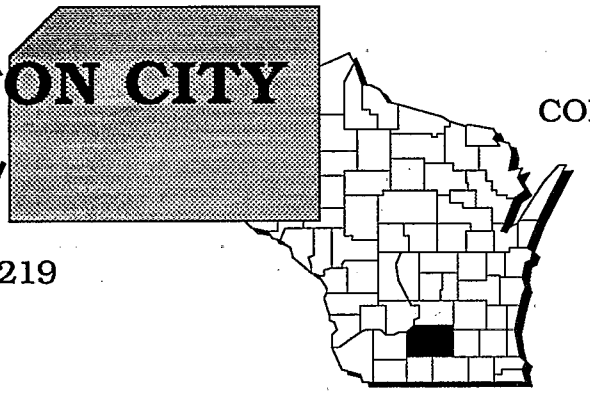
Environmental Progress

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

STOUGHTON CITY LANDFILL

WISCONSIN

EPA ID# WID980901219



REGION 5
CONGRESSIONAL DIST. 02
Dane County
Stoughton

Alias:
Stoughton Landfill # 113

Site Description

The 27-acre Stoughton City Landfill was purchased by the City of Stoughton in 1952 for *landfill* operations. Between 1952 and 1969, the site was operated as an uncontrolled dump. In 1969, the site began operating as a State-licensed landfill. The landfill originally was established for the disposal of commercial and municipal wastes. Local residents also used the landfill for household waste disposal. Uniroyal, Inc., a plastics and rubber products manufacturer, disposed of wastes at the site from 1953 to 1962. The wastes primarily consisted of solvents, other liquid chemicals, and vinyl plastic scrap. During this time, open burning of the liquid wastes was common, and soil was used to cover up the smoldering residue. Liquid wastes were also reported to have been disposed of in *boreholes* on a portion of the landfill. A 1972 Wisconsin Department of Natural Resources (WDNR) license prohibited the disposal of hazardous waste at the site. In 1978, the site was *capped*, seeded, and closed according to WDNR regulations. As part of *closure* plans, six wells were installed to monitor groundwater conditions at and near the site. The landfill was officially closed in 1982, and plans were developed by Stoughton to establish a park on top of the revegetated site. The WDNR sampled the monitoring wells in 1983 and found that two of the six wells contained elevated levels of *volatile organic compounds* (VOCs). Routine sampling conducted by the City of Stoughton also indicated the presence of VOCs in water collected from the monitoring wells. Approximately 10,000 people live within a 3-mile radius of the site.

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

NPL LISTING HISTORY
Proposed Date: 10/15/84
Final Date: 06/10/86

Threats and Contaminants

The groundwater is contaminated with various VOCs and could be hazardous to the health of individuals if it is ingested over a long period of time. The municipal wells in the City of Stoughton have a potential of being contaminated by the hazardous materials at the site; however, because of their depth and location, the risk is extremely low.

Cleanup Approach

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

Response Action Status

Entire Site: The parties potentially responsible for the contamination are conducting an investigation to determine the nature and extent of the contamination. The study is expected to be completed in 1991. The purpose of the investigation is to: (1) identify the amounts and types of VOCs present; (2) define the process through which contaminants may be released into the environment; (3) define the direction in which contaminants may travel; (4) define the boundaries of the contamination; and (5) determine the routes of exposure and potential environmental and public health threats. Once the study is completed in late 1990, the EPA will review the findings and alternative cleanup remedies to select the final strategy for addressing site contamination.

Site Facts: Uniroyal, Inc. and the City of Stoughton signed a *Consent Order* in 1988 for the company to conduct an investigation of the site under EPA and WDNR oversight.

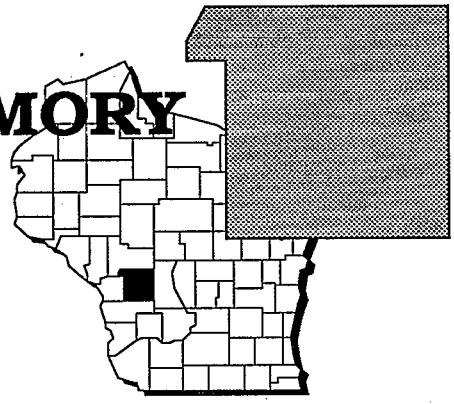
Environmental Progress

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

TOMAH ARMORY

WISCONSIN

EPA ID# WID980610299



REGION 5
CONGRESSIONAL DIST. 03
Monroe County
Tomah

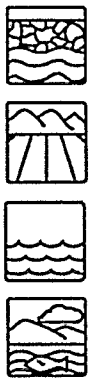
Site Description

The 10-acre Tomah Armory site was operated by the City of Tomah as an open unlined dump accepting both municipal and industrial wastes from the early 1950s to 1955. During part of this period, the City had a similar operation 2 miles to the south, which is now known as the Tomah Fairgrounds, also an NPL site. Both Tomah sites accepted primarily municipal refuse. However, Union Camp Corporation notified the EPA that its polyethylene plant in Tomah had sent to the sites 23,770 gallons of solvents and heavy metals, including lead and chromium components. The city sold part of the land to the Wisconsin National Guard for construction of an Armory. Homes were built on the rest of the land. According to the City's Director of Public Works, a portion or all of the dump was excavated and filled with sand before the buildings were constructed. Approximately 9,500 people draw drinking water from public and private wells within 3 miles of the site. The nearest well is 1 mile from the site. The Lemonweir River is approximately 500 feet away from the site. This river and Lake Tomah are used for recreation.

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

NPL LISTING HISTORY
Proposed Date: 01/22/87
Final Date: 07/21/87

Threats and Contaminants



The groundwater, soil, and surface water are contaminated with *volatile organic compounds* (VOCs) and heavy metals including chromium and lead. The contaminated groundwater, soil, and surface water could pose a health hazard to individuals if they are accidentally touched or swallowed. The contamination at the site could affect the *wetland* adjacent to the site. Nearby Deer Creek also could be polluted by the contamination from the site, and the trout living in the stream could *bioaccumulate* the toxic substances present in the site.

continued

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 plans to conduct an investigation of the site to determine the nature and extent of the contamination and to evaluate alternative remedies for site cleanup. The investigation is expected to begin in late 1990.

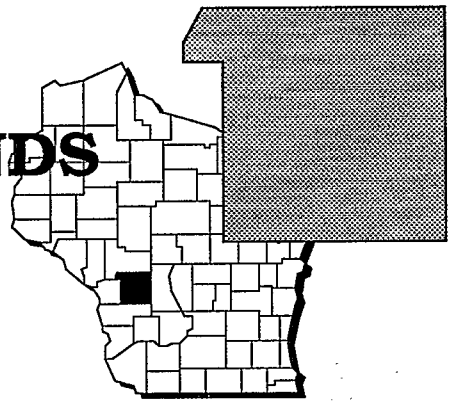
Environmental Progress

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

TOMAH FAIRGROUNDS

WISCONSIN

EPA ID# WID980616841



REGION 5

CONGRESSIONAL DIST. 03

Monroe County

Tomah

Site Description

From 1953 to 1959, the 10-acre Tomah Fairgrounds site was operated by the City as an open unlined dump, accepting both industrial and municipal wastes. During this period, the City had a similar operation 2 miles away, where the Tomah Armory is now located; this site is also listed on the NPL. Both Tomah sites accepted primarily municipal refuse. However, Union Camp Corporation notified the EPA that its polyethylene plant in Tomah had sent 23,770 gallons of solvents and heavy metals, including lead and chromium components, to the sites. After the dump in the southwest stopped operating, the City covered the area, which then became part of the Tomah Fairgrounds. Approximately 9,500 people draw drinking water from the public and private wells within 3 miles of the site. The closest residence is within 1/4 mile of the site, and approximately 4,100 people live within a 1-mile radius. The site is actively used as a fairgrounds; therefore, access is unrestricted. The nearest *downslope* water, Lake Tomah, is approximately 400 feet away from the site and is used for recreational purposes. Because the wastes were inadequately covered and there were no diversion structures, contaminated *runoff* could have reached nearby surface waters.

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

NPL LISTING HISTORY

Proposed Date: 01/22/87

Final Date: 07/21/87

Threats and Contaminants

The groundwater, soil, and surface water are contaminated with *volatile organic compounds* (VOCs) and heavy metals including chromium and lead. The contaminated groundwater, soil, and surface water could be a health hazard to individuals if it is accidentally touched or swallowed. In an inspection conducted in 1984, the EPA observed areas where erosion had worn away some of the soil; thus, people and animals could potentially come into direct contact with hazardous substances.

continued

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 plans to begin an investigation of the site in late 1990 to determine the nature and extent of the contamination. The results of the investigation will be used to evaluate various cleanup alternatives and to select final cleanup remedies.

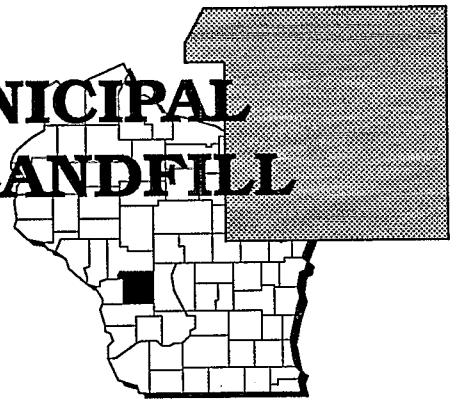
Environmental Progress

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

TOMAH MUNICIPAL SANITARY LANDFILL

WISCONSIN

EPA ID# WID980610307



REGION 5

CONGRESSIONAL DIST. 03

Monroe County

Tomah

Site Description

The 40-acre Tomah Municipal Sanitary Landfill site was owned and operated by the City of Tomah from 1960 to 1979 and was licensed by the State to accept municipal wastes. In 1979, the site was covered with sand and planted with red pines. The *landfill* is unlined. One local facility, the Union Camp Corporation, notified the EPA that it had sent to the landfill approximately 1,514 drums of wastes containing barium, chromium, lead, spent solvents, ethyl acetate, and *trichloroethylene* (TCE). In 1984, the EPA inspected the site and sampled the groundwater and *sediments* in Deer Creek, which runs through the property 250 feet north of the filled area. On-site groundwater is contaminated with heavy metals and *volatile organic compounds* (VOCs). The City of Tomah has a population of approximately 7,300 people. Municipal wells serving the City of Tomah are located within a 3-mile radius of the site. Approximately 2,000 people live within a 1-mile radius of the site and use private wells for drinking water supplies. Deer Creek is used by local residents as a trout stream. A freshwater *wetland* is located within 1,000 feet of 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 VOCs and heavy metals including cadmium, chromium, and lead. The contaminated groundwater could pose a health threat to individuals if it is accidentally touched or swallowed. Also, contamination could enter the food chain through the fish in Deer Creek, which may be polluted.

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 plans to begin an investigation in late 1990 to determine the nature and extent of the contamination. The results of the investigation will be used to evaluate various cleanup alternatives and also to select a final cleanup method.

Environmental Progress

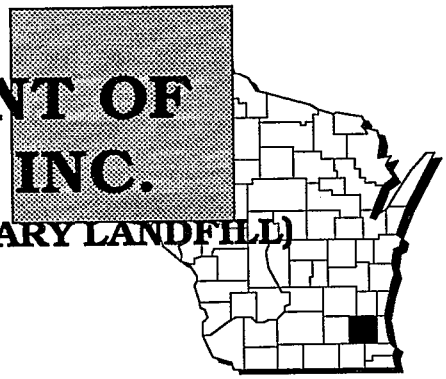
After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Tomah Municipal Sanitary Landfill site while investigations and cleanup activities are being planned.

WASTE MANAGEMENT OF WISCONSIN, INC.

(BROOKFIELD SANITARY LANDFILL)

WISCONSIN

EPA ID# WID980901235



REGION 5

CONGRESSIONAL DIST. 09

Waukesha County

Brookfield

Site Description

Waste Management of Wisconsin operated a 20-acre sanitary *landfill* at this site from 1969 to 1981. Prior to 1969, the site had been a sand and gravel pit. In 1976, Waste Management received a permit from the Wisconsin Department of Natural Resources (WDNR) to accept municipal waste. According to EPA tests in 1985, the groundwater is contaminated with cyanide. Approximately 11,000 people obtain drinking water from public and private wells within 3 miles of the site; the nearest well is within 1,000 feet of the site. Poplar Creek, 3,600 feet southwest of the site, is used for recreational activities. A freshwater *wetland* is located 1,800 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Threats and Contaminants

The groundwater is contaminated with various *volatile organic compounds* (VOCs), vinyl chloride, and cyanide from site landfilling operations. Potential health risks include touching or accidentally ingesting contaminated groundwater. The wetland also may be threatened.

Cleanup Approach

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

continued

Response Action Status

Entire Site: An investigation into the type and extent of contamination is scheduled to begin in late 1990. This investigation will be the basis for evaluating alternative cleanup remedies.

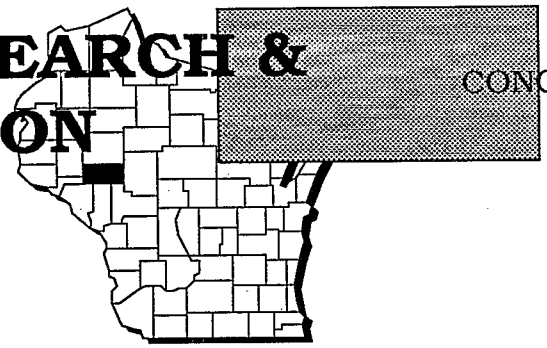
Environmental Progress

After proposing this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Waste Management of Wisconsin site at Brookfield while studies and cleanup activities are being planned.

WASTE RESEARCH & RECLAMATION COMPANY

WISCONSIN

EPA ID# WID990829475



REGION 5

CONGRESSIONAL DIST. 03

Eau Claire County

Eau Claire

Site Description

The 9-acre Waste Research & Reclamation (WRR) site was occupied by a roofing company from the 1970s to 1981. WRR has occupied the site since 1981. WRR is primarily a reclamation and recycling business for hazardous liquid wastes, fuel blending, and transportation of hazardous waste for incineration or disposal. Waste materials handled include chlorinated and fluorinated solvents and flammables. Approximately 160 people live within a 1-mile radius of the site. The site is 1/2 mile east of Lowes Creek, a tributary of the Chippewa River. The closest residence is 1/4 mile from the site. A private well is located 1,500 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

The groundwater, soil, and surface water are contaminated with various *volatile organic compounds* (VOCs) from site waste handling procedures. People who accidentally ingest or touch contaminated materials may at risk.

Cleanup Approach

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

continued

Response Action Status

Entire Site: The site has been divided into six solid waste management units for investigation and cleanup purposes: (1) drum storage sheds; (2) trailer parking, product warehouse, and abandoned drum storage area; (3) the pole barn cooling water discharge area and abandoned drum storage area; (4) abandoned *lagoon*, existing holding tank, and existing collection *sump* for surface water *runoff*; (5) the LUWA reclamation area located in the central and western portions of the site; and (6) the KONTRO reclamation area located in the south-central portions of the site. The parties potentially responsible for site contamination currently are conducting an investigation into the nature and extent of groundwater, surface water, and soil contamination at the site. The investigation will define the contaminants and recommend alternatives for the final cleanup. The studies are scheduled for completion in late 1990.

Site Facts: In 1983, the State signed a *Consent Order* with the potentially responsible parties to implement a long-term monitoring program.

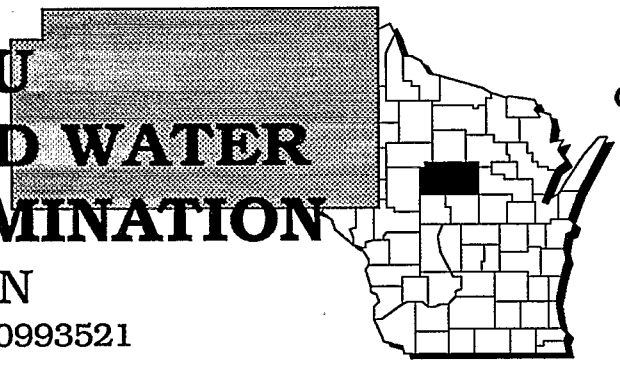
Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Waste Research & Reclamation Company site while studies are taking place and cleanup activities are being planned.

WAUSAU GROUND WATER CONTAMINATION

WISCONSIN

EPA ID# WID980993521



REGION 5

CONGRESSIONAL DIST. 07

Marathon County

Wausau

Alias:
Wausau Water Supply

Site Description

The City of Wausau provides drinking water for approximately 33,000 people from groundwater wells located on both sides of the Wisconsin River. In 1982, three of the city's wells were found to be contaminated with high levels of *volatile organic compounds* (VOCs). Affected city wells were removed from service. In 1984, an interim carbon filter system was installed until two *air strippers* could be constructed. The air strippers, installed at the municipal water facility in 1984, replaced the carbon filters as a long-term solution for providing acceptable drinking water to city residents. Uncontaminated water from two wells is blended with treated water from contaminated wells to reduce VOC concentrations in the water supply distribution system. Approximately 32,000 people live within a 3-mile radius of the site. The Wisconsin River, which bisects the area, is used for commercial and recreational purposes.

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

NPL LISTING HISTORY

Proposed Date: 04/10/85

Final Date: 06/10/86

Threats and Contaminants

The groundwater and soil are contaminated with various VOCs. Potential health risks include accidentally ingesting or touching contaminated groundwater.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two *long-term remedial phases* focusing on cleanup of the West Side contamination *plume* and cleanup of the other contamination plumes.

continued

Response Action Status

Immediate Actions: In 1984, the EPA installed carbon filters to remove VOCs from the contaminated groundwater. Air strippers were installed in two wells.

West Side Contaminant Plume: In 1988, the EPA selected the following cleanup actions for this phase of the cleanup: (1) groundwater pumping and treatment using air stripping with discharge to the Wisconsin River; (2) groundwater monitoring; and (3) provision for implementation of an additional extraction well as necessary. The treatment system is being designed by the potentially responsible parties; it is expected to be operational in 1990.

Other Contamination Plumes: In 1989, the EPA selected the following remedies for two plumes: (1) installation of soil vapor extraction systems to remove VOCs from soils at each of the three identified source areas; (2) treatment of gases produced by the soil vapor extraction operation using vapor phase carbon units which will be regenerated at an off-site facility; and (3) pumping of the municipal supply wells to speed removal of the groundwater contaminant plumes affecting these wells. The design of the remedies is scheduled to be completed in late 1990.

Site Facts: A *Consent Decree* was signed in 1989 with the parties potentially responsible for site contamination to finance a portion of past cleanup costs.

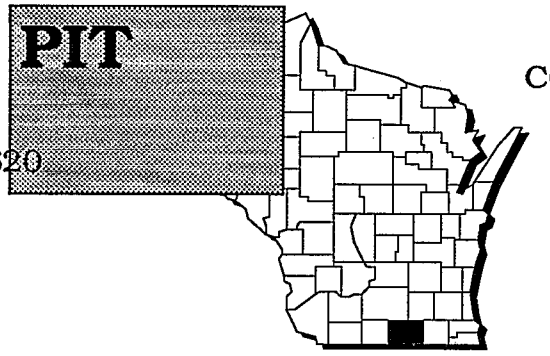
Environmental Progress

The installation of carbon filters and air strippers in the drinking water supply has reduced the potential of exposure to hazardous substances in the drinking water and will continue to protect residents near the Wausau Ground Water Contamination site until the planned groundwater pumping and treatment facility is operational and has reduced contamination to safety levels. Soil cleanup technologies currently are being designed.

WHEELER PIT

WISCONSIN

EPA ID# WID980610620



REGION 5

CONGRESSIONAL DIST. 01

Rock County

1 1/2 miles east of Janesville

Site Description

The 3 3/4-acre Wheeler Pit site, a former disposal area, lies within a 15-acre abandoned gravel pit. Wheeler Pit was originally mined for sand and gravel by the Chicago, Milwaukee, St. Paul, and Pacific Railroad Company. In 1956, General Motors Corporation (GMC) leased a portion of the pit from the railroad for waste disposal. From 1960 to 1974, GMC used Wheeler Pit to dispose of paint and wastewater *sludges* from its Janesville auto assembly plant as well as coal ashes from power plant boilers. The sludge and ash were contained by a dike at the pit. In 1971, a liquid was found *seeping* onto the ground from the GMC disposal area. Disposal at Wheeler Pit ended in 1973, and the site was covered in 1975 at the request of La Prairie Township. From 1974 to 1981, the site was intermittently monitored for groundwater contamination. Elevated levels of *trichloroethylene* (TCE), chromium, zinc, and barium were found in site groundwater samples collected in 1981 by GMC and the Wisconsin Department of Natural Resources (WDNR). Approximately 25,000 people live within 3 miles of the site. The Rock River is approximately 2 miles west of the site. The City of Janesville operates five groundwater wells within 3 miles of the site. Three of the wells supply virtually all of the Janesville water supply. Five private wells are located within 1/4 mile of the site.

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

NPL LISTING HISTORY

Proposed Date: 09/08/83

Final Date: 09/21/84

Threats and Contaminants

Groundwater resources underlying the site were found to be contaminated with heavy metals including iron, manganese, chromium, and arsenic, as well as low levels of *volatile organic compounds* (VOCs). Potential health risks include accidental ingestion of contaminated groundwater.

Cleanup Approach

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

Response Action Status

Entire Site: A field investigation of the site has been completed to determine the type and extent of contamination. Monitoring wells were installed and test pits were excavated. A study is now being conducted to determine the most effective measures to clean up the site. These recommendations are scheduled to be issued in late 1990.

Environmental Progress

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

GLOSSARY:

TERMS USED IN THE FACT SHEETS

*This glossary defines the **italicized** terms used in the site fact sheets for the State of Wisconsin. 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).

Aeration: A process that promotes breakdown of contaminants in soil or water by exposing them to air.

Air Stripping: A process whereby volatile organic chemicals (VOCs) are removed from contaminated material by forcing a stream of air through it in a pressurized vessel. The contaminants are evaporated into the air stream. The air may be further treated before it is released into the atmosphere.

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.

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

Bioaccumulate: The process by which some contaminants or toxic chemicals gradually collect and increase in concentration in living tissue, such as in plants, fish, or people as they breathe contaminated air, drink contaminated water, or eat contaminated food.

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

Borehole: A hole drilled into the ground used to sample soil and groundwater.

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.

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.

Creosotes: Chemicals used in wood preserving operations and produced by distillation of tar, including polycyclic aromatic hydrocarbons and polynuclear aromatic hydrocarbons [see PAHs and PNAs]. Contaminating sediments, soils, and surface water, creosotes may cause skin ulcerations and cancer with prolonged exposure.

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].

Effluent: Wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

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.

Generator: A facility that emits pollutants into the air or releases hazardous wastes into water or soil.

Hydrogeology: The geology of groundwater, with particular emphasis on the chemistry and movement of water.

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

Intake: The source where a water supply is drawn from, such as from a river or waterbed.

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.

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.

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.

Seepage Pits: A hole, shaft, or cavity in the ground used for storage of liquids, usually in the form of leachate, from waste disposal areas. The liquid gradually leaves the pit by moving through the surrounding soil.

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.

Sumps: A pit or tank that catches liquid runoff for drainage or disposal.

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.