United States
Environmental Protection
Agency

Solid Waste And
Emergency Response
(5201 G)

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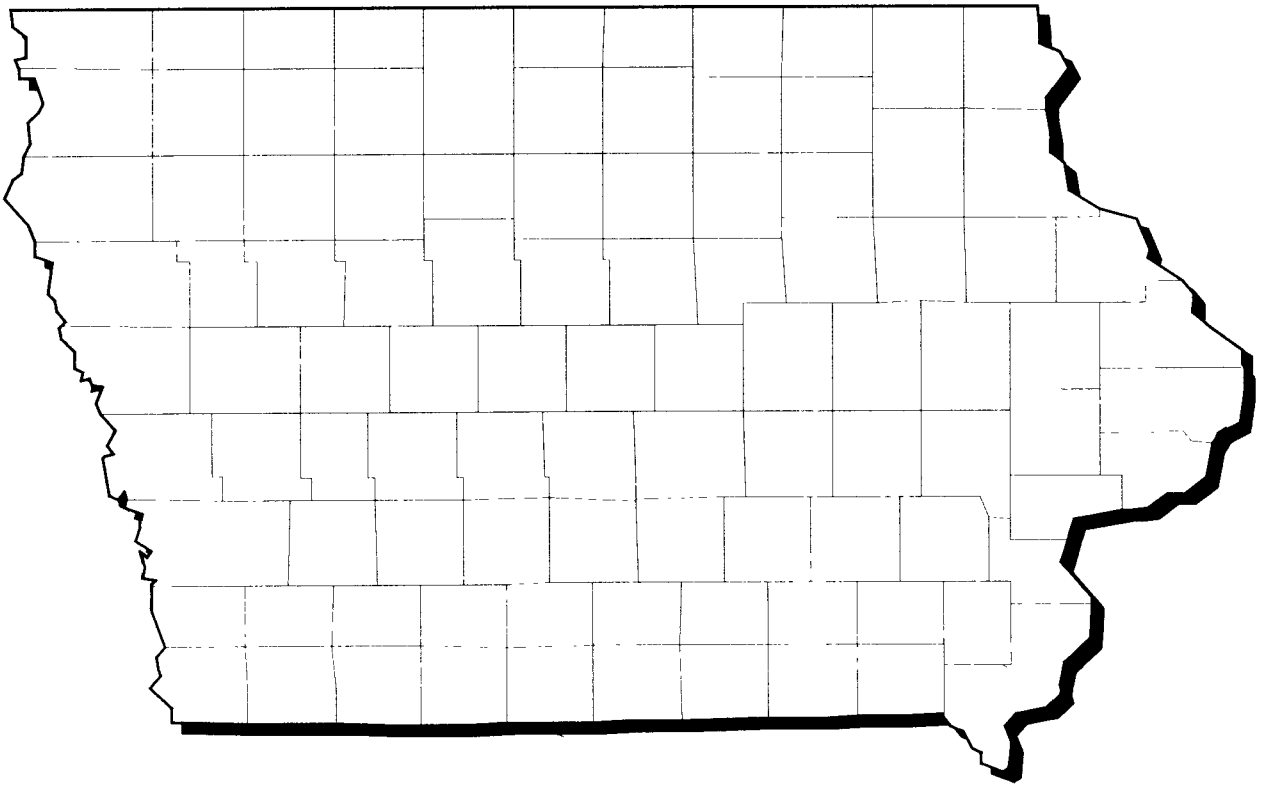
May 1995

SUPERFUND: Progress at National Priority List Sites



IOWA 1995 UPDATE

Printed on Recycled Paper

How to Use the NPL Book

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

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

How Can You Use This State Book?

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

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

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

NPL LISTING HISTORY

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

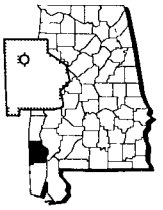
SITE RESPONSIBILITY

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

ENVIRONMENTAL PROGRESS

Summarizes the actions to reduce the threats to nearby residents and the surrounding environment and the progress towards cleaning up the site.

SITE NAME
STATE
EPA ID# ABC0000000



EPA REGION XX
COUNTY NAME
LOCATION

Other Names:

Site Description
A

Site Responsibility:

NPL Listing History
Proposed. XX/XX/XX
Final XX/XX/XX

Threats and Contaminants
B

Cleanup Approach
C

Response Action Status
D

Site Facts:
E

Environmental Progress

Site Repository

SITE REPOSITORY

Lists the location of the primary site repository. The site repository may include community relations plans, public meeting announcements and minutes, fact sheets, press releases, and other site-related documents.

A

SITE DESCRIPTION

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

B

THREATS AND CONTAMINANTS

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

C

CLEANUP APPROACH

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

D

RESPONSE ACTION STATUS

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

E

SITE FACTS

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

Guide to the NPL Book Icons

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

Icons in the Threats and Contaminants Section

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

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

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

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

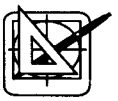
Threatened or contaminated *Environmentally Sensitive Areas* in the vicinity of the site. (Examples include wetlands and coastal areas or critical habitats.)

Icons in the Response Action Status Section

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

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

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



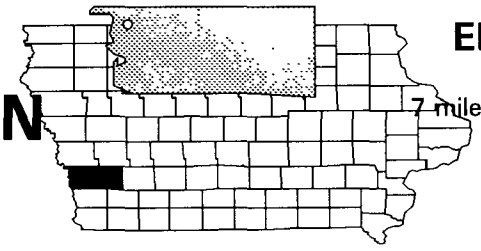
Remedy Design means that engineers are preparing specifications and drawings for the selected cleanup technologies.

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

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

EPA ID Number	Site Name
IAD042581256	AIDEX CORPORATION
IAD980687933	DES MOINES TCE
IAD980685804	E.I. DUPONT DE NEMOURS (COUNTY RD X23)
IAD005279039	ELECTRO-COATINGS, INC.
IAD981124167	FAIRFIELD COAL GASIFICATION PLANT
IAD022193577	FARMERS' MUTUAL COOPERATIVE
IA7213820445	IOWA ARMY AMMUNITION PLANT
IAD005291182	JOHN DEERE (OTTUMWA WORKS LANDFILLS)
IAD980631063	LABOUNTY DUMP
IAD000606038	LAWRENCE TODTZ FARM
IAD980969190	MASON CITY COAL GASIFICATION PLANT
IAD085824688	MID-AMERICA TANNING CO.
IAD069625655	MIDWEST MANUFACTURING/NORTH FARM
IAD980852461	NORTHWESTERN STATES PORTLAND CEMENT CO.
IAD980852578	PEOPLES NATURAL GAS CO.
IAD980632509	RED OAK CITY LANDFILL
IAD980630560	SHAW AVENUE DUMP
IAD980630750	SHELLER-GLOBE CORP. DISPOSAL
IAD980630487	VOGEL PAINT & WAX CO.
IAD98456656	WATERLOO COAL GASIFICATION PLANT
IAD065210734	WHITE FARM EQUIPMENT CO. DUMP

AIDEX CORPORATION
IOWA
EPA ID# IAD042581256



EPA REGION 7
Mills County
7 miles south of Council Bluffs

Site Description

The 15-acre Aidex Corporation site is a former pesticide formulation facility located approximately 7 miles south of Council Bluffs. In 1976, a building used to formulate the herbicide atrazine and other pesticides was destroyed by a fire. The surrounding soil was contaminated by water used to extinguish the blaze. In 1980, Aidex filed for bankruptcy. Cleanup operations were undertaken at the site in 1981. When cleanup began, approximately 3,400 drums containing pesticides were stored in open areas on the site. A concrete pit in the destroyed building contained about 2 feet of contaminated water, and a large underground storage tank also held contaminated materials. Soil and groundwater were contaminated by pesticides spills. Approximately 600 people live within 3 miles of the rural site. A shallow aquifer underlies the site and is contaminated. Within a 2-mile radius of the site are 42 shallow domestic water wells.

Site Responsibility: This site was addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 10/23/81
Final Date: 09/08/83
Deleted 10/21/93

Threats and Contaminants

The groundwater was contaminated with atrazine, a pesticide produced at the site. The soil was contaminated with other pesticides including aldrin and chlordane from wastes stored at the site and as a result of the 1976 fire. The potential existed for pesticides to migrate off the Aidex site in either the soil or the groundwater. Flooding occurring in the area could have facilitated migration of contaminants into the Missouri River flood plain. The threat of direct contact with or ingestion of contaminated soil and groundwater has been eliminated.

Cleanup Approach

Response Action Status

Immediate Actions: In late 1981, the EPA constructed a security fence around the site to restrict access.

Soil and Groundwater: Cleanup technologies selected to address contamination by pesticides in the soil and groundwater included: excavating buried wastes from within the perimeter of the disposal trench and transporting the wastes off site for disposal in a secure landfill; grading, when necessary, and seeding the remaining soils; expanding the monitoring well network by adding three wells to monitor mid-range and deep water quality downgradient of the site; vacuuming the buildings to remove loose dust from all accessible interior surfaces and washing floors and walls; and testing monitoring wells annually for 30 years or until a determination is made that the site no longer poses a threat to nearby drinking water supplies. The EPA and the Army Corps of Engineers removed 20,608 cubic yards of contaminated soil and buried wastes. The wastes were transported off site, and the site was backfilled and graded in mid-1987. The State has been collecting annual groundwater samples from on- and off-site monitoring wells. Since 1987, the EPA collected additional samples from the interior of the on-site buildings in 1987, 1988, and 1991. Based on these samples, it was determined that the groundwater does not pose unacceptable risks and no further cleanup is necessary.

Surface Cleanup: The EPA and the Army Corps of Engineers supervised cleanup work that consisted of gathering and placing wastes in approved containers, storing wastes that were spread throughout the yard, draining and decontaminating a buried tank and waste pit, and constructing a drainage ditch around the site to prevent excessive water from entering. This work was performed in 1983, and off-site disposal of the collected materials followed in a second phase, which was completed in 1987.

Site Facts: The Department of Justice, on behalf of the EPA, brought a Federal civil action, seeking monetary relief against parties potentially responsible for wastes at the site. In 1992, a Consent Decree was entered by the court that required the parties to pay back the cleanup costs incurred.

Environmental Progress

The removal of wastes to a secure landfill and the establishment of security measures at the Aidex Corporation site eliminated the potential for exposure to hazardous materials while cleanup activities were taking place. Site cleanup has been completed and the EPA has deleted the site from the NPL.

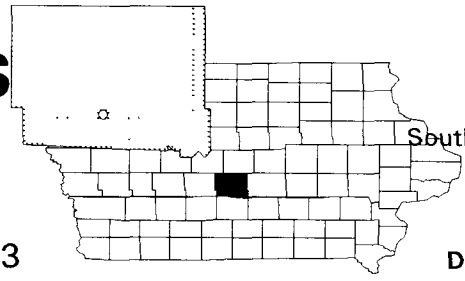
Site Repository

Glenwood City Hall, 107 S. Locust Street, Glenwood, IA 51534

DES MOINES TCE

IOWA

EPA ID# IAD980687933



EPA REGION 7

Polk County

Southwest of downtown Des Moines

Other Names:
Tuttle Street Landfill
Des Moines Vocational School
Dichem
Dico Company

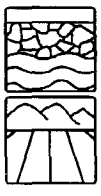
Site Description

The Des Moines TCE site is an area of contaminated groundwater located southwest of downtown Des Moines, in the flood plain of the Raccoon River. The surrounding area is industrial and commercial, with some recreational parklands. The city's public water supply, which serves approximately 260,000 people, was discovered to be contaminated with trichloroethylene (TCE) in 1976. The contamination was determined to originate from the city's groundwater source for its water supply. The Dico Company, who used and disposed of solvent wastes containing TCE on their property through early 1979, was determined to be a potential source of the contamination. In 1984, the Des Moines Water Works stopped using the contaminated portion of the groundwater supply. In 1986, the EPA ordered Dico to undertake the Agency's selected remedy to protect the city's public water supply. During cleanup activities, another plume of contaminated groundwater was discovered being drawn into the groundwater extraction system. An investigation was subsequently initiated to address the contamination apparently originating to the north and west of the Dico property.

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

NPL LISTING HISTORY
Proposed Date: 12/30/82
Final Date: 09/08/83

Threats and Contaminants



The groundwater and soil are contaminated with volatile organic compounds (VOCs), including tetrachloroethylene, TCE, and vinyl chloride, and pesticides and herbicides from former industrial operations and waste disposal practices. Accidentally ingesting or coming into contact with the contaminants poses a health risk.

Cleanup Approach

The site is being addressed in two stages: initial actions and three long-term remedial phases focusing on site-wide groundwater cleanup, controlling the source of contamination, and addressing the North Plume.

Response Action Status

Initial Actions: Dico is in the process of cleaning several buildings on their property that were previously used to formulate and store pesticide and herbicide products. In addition, Dico is covering the majority of their property with an asphalt cap to address the threat presented by the surface soil contamination.

Groundwater: The remedy for the protection of the Des Moines water supply features: collecting contaminated groundwater with extraction wells; isolating the northernmost section of the public groundwater supply system; treating the groundwater by an air stripper to remove contaminants; discharging the treated water to the Raccoon River; and operating the extraction wells until water collected from all monitoring wells meets EPA drinking water standards for four consecutive months. Dico, under EPA oversight, designed and built the groundwater extraction and treatment system, which included seven extraction wells and an air stripping system. Cleanup activities began in late 1987. Dico has and will continue to operate and maintain the groundwater treatment system until the specified clean up criteria are achieved.

Source Control: In 1989, Dico began an intensive study of the sources of the pollution on its property. This investigation showed that contamination by VOCs and pesticides are of significant concern at the site. The studies for each of these contaminants will identify sources as well as potential remedies. The study focusing on VOC contamination is expected to be completed in 1995. The study focusing on pesticide contamination has been initiated and will be conducted over the next year to determine the appropriate course of action. Remedies to address each of the contaminants will be selected after the investigations are completed.

North Plume: In 1988, the EPA began investigating the potential sources of contaminated groundwater being drawn into the Dico groundwater extraction and treatment system. The EPA installed additional monitoring wells to the north and west of the Raccoon River near the Fleur Drive Bridge and north to about 25th and High Street. The wells have been monitored to determine the extent of contamination and its source(s) and to warn of any approaching danger to the public water supply. This investigation was completed in the spring of 1992, and concluded that no further action is warranted as the existing groundwater extraction and treatment system will capture and cleanup the contaminated groundwater plume.

Site Facts: In 1986, the EPA issued an Administrative Order requiring Dico to design, build, and operate a groundwater extraction system. Dico signed an Administrative Order on Consent with the EPA in August 1989 to conduct a study of how to control the potential sources of contamination at its property.

Environmental Progress

Groundwater cleanup at the Des Moines TCE site is currently underway which, along with the other initial actions, has reduced the potential for exposure to hazardous materials through drinking water while remaining cleanup actions are being planned.

Site Repository

Des Moines City Library, 100 Locust, Des Moines, IA 50308

E.I. DUPONT DE NEMOURS & COMPANY, INC. (COUNTY ROAD X23)

IOWA

EPA ID# IAD980685804

EPA REGION 7

Lee County

3 1/2 miles southwest of West Point

Other Names:
Baier, James Farm
McCarl Farm

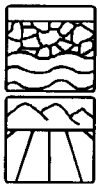
Site Description

The E.I. DuPont de Nemours & Company, Inc. (County Road X23) site, an industrial waste dump in a rural area of Lee County, consists of two areas off County Road X23, about 3 1/2 miles southeast of West Point. In the early 1950s, DuPont sent wastes from its nearby Fort Madison paint plant to the two disposal sites, which are about a mile apart and cover 4 acres. One is known as the Baier farm subsite and the other as the DuPont/McCarl subsite. DuPont estimates that between 1949 and 1953, a contractor disposed of 48,000 to 72,000 drums of paint waste at the two subsites. These wastes were placed in shallow trenches and burned, then the soil was graded flat. The properties drop off to ravines on the northwestern sides. The company estimates that 4,500 to 7,000 tons of ash and unburned sludges still may exist on the areas. Approximately 1,200 people depend on private wells within 3 miles of the site as their sole source of drinking water. Two creeks about a mile from the site are used for limited recreational activities. Approximately 160 people live within a mile of the site; 1,250 live within 3 miles, with the closest population being 500 feet from the site. There are 40 private wells within a mile, and 330 private wells within 3 miles; the nearest is 500 feet from the site. Water is consumed by the nearby population as well as local livestock.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

Threats and Contaminants



Groundwater and soils were contaminated with heavy metals, including cadmium and lead, and volatile organic compounds (VOCs) from former disposal activities. Potential health threats consisted of ingesting contaminated groundwater and directly contacting both groundwater and soil. Contaminants also could have accumulated in plants consumed by cattle.

Cleanup Approach

Response Action Status

Initial Actions: In late 1991, DuPont removed contaminated surface material which could not be stabilized to an off-site, Federally approved disposal facility.

Entire Site: In 1985, the EPA installed three groundwater monitoring at the Baier subsite. Sampling in 1986 showed elevated concentrations of metals. Downstream water samples showed similar findings. When the McCarl subsite was studied in 1986, groundwater and soil samples again revealed metals. In 1989, the EPA ordered DuPont to perform a study of contamination at the site. DuPont completed the study in early 1991. Based on the results of this study, the EPA recommended stabilization and solidification of contaminated soil and monitoring of the groundwater as cleanup remedies. DuPont completed the design of these cleanup remedies in late 1992 and cleanup activities began shortly thereafter. Site cleanup activities were completed in 1993.

Site Facts: On July 5, 1989, the EPA issued a Unilateral Order to DuPont requiring DuPont to undertake a study of site contamination and cleanup options at the Baier subsite. In late 1991, the EPA issued a Consent Decree requiring DuPont to design and conduct the site cleanup.

Environmental Progress

The removal of contaminated surface material, treatment of the contaminated soil, and monitoring of the groundwater has eliminated risks to public health or the environment from the site. All cleanup activities are complete. The EPA proposed the site for deletion from the NPL in the summer of 1994.

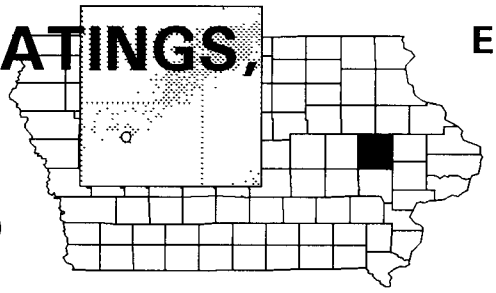
Site Repository

Idol Raschid Memorial Library, 3421 Avenue L., Fort Madison, IA 52627

ELECTRO-COATINGS, INC.

IOWA

EPA ID# IAD005279039



EPA REGION 7
Linn County
Cedar Rapids

Site Description

The 1-acre Electro-Coatings, Inc. site is a plating shop located in Cedar Rapids that has been operational since 1947. The plant currently performs chromium, cadmium, nickel, and zinc plating. It lies at the northern edge of Cedar Lake and on the eastern edge of the Cedar River. In 1976, high levels of chromium were discovered in groundwater from a nearby cooling water well. Electro-Coatings, Inc. then began a series of monitoring and cleanup actions in response to State investigations and requirements. The State required that Electro-Coatings, Inc. determine the extent of contamination. Electro-Coatings monitored the neighboring off-site wells, installed on- and off-site monitoring wells, and conducted monthly sampling. Forty of the 46 Cedar Rapids municipal wells, serving nearly 10,000 people, lie within 3 miles of the site. The nearest residence is located within a half-mile of the site, and the nearest well lies 2,000 feet away. Approximately 12,100 residents live within 1 mile of the site; 109,100 live within a 3-mile radius of the site. The groundwater in the vicinity of the Electro-Coatings site is used for industrial processes.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 10/04/89

Threats and Contaminants

Groundwater is contaminated with volatile organic compounds (VOCs) and heavy metals from wastewater spills. The chief threat to public health is drinking contaminated groundwater. The total area of groundwater pollution has not yet been determined; however, no groundwater contamination has been detected in municipal drinking water wells. Nearby water bodies, including lakes and streams, potentially are threatened by site contamination.

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 1976, Electro-Coatings, Inc. removed a leaking deep-pit tank and added 18,000 pounds of ferrous sulfate and 6,600 pounds of sulfuric acid to the area in an unsuccessful attempt to chemically change the remaining hexavalent chromium to the less hazardous form of the chemical. In addition, a new pit tank and floor were installed. In 1977, after a wastewater spill, Electro-Coatings, Inc. installed new monitoring wells to define the area of groundwater contamination. In the spring of 1992, an existing chromium dipping tank was taken out of service. Contaminated soil and concrete were removed and disposed of as hazardous wastes.

Entire Site: After discovering chromium in a neighboring company's well in 1982, the State required the installation of five more monitoring wells to track the extent and migration of the contaminant plume. An intensive study to determine the full extent and nature of the contamination was completed in 1994. A remedy, which includes pumping and treating the contaminated groundwater, continuous monitoring, and the installation of additional wells, if needed, was chosen in 1994.

Site Facts: In June 1977, the State issued an Executive Order requiring Electro-Coatings to install monitoring wells to define the extent of the contaminated plume. In January 1990, Electro-Coatings entered into a Consent Order with the Iowa Department of Natural Resources to conduct a site investigation. Concern has been targeted at the potential contamination of Cedar Lake by Electro-Coatings and other sources.

Environmental Progress

As a result of initial actions, the Electro-Coatings site does not currently pose an immediate threat to public health or the environment while final cleanup remedies are being planned.

Site Repository

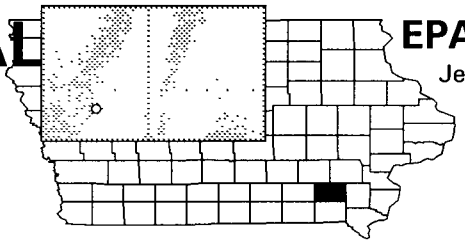
Cedar Rapids Public Library
500 First Street, S.E.
Cedar Rapids, IA

Iowa Dept of Natural Resources Records Center
Wallace State Office Bldg., 5th Floor
Des Moines, IA 50319

FAIRFIELD COAL GASIFICATION PLANT

IOWA

EPA ID# IAD981124167



EPA REGION 7
Jefferson County
Fairfield

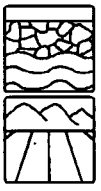
Site Description

The Fairfield Coal Gasification Plant site occupies one city block between West Burlington and West Washington Avenues in Fairfield. The plant produced a natural gas substitute from coal from 1878 until 1950. The plant has been owned and operated by Iowa Electric Light and Power since 1917. Since 1950, the utility has used the site as an operations facility. The main wastes are polycyclic aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs), which are found in the coal tar left over from the gasification process, and cyanide salts left in the iron oxide waste produced when the gas is purified. Operators sold some of the coal tar and buried some in an earthen pit on the site or dumped it in a nearby ditch. Disposal methods for the iron-cyanide waste are unknown, but it also may have been dumped on site. In 1985, the utility found that groundwater near the site was contaminated. The utility began a monitoring program to assure that private wells were unaffected. The EPA became involved in 1987 by conducting an expanded site investigation, installing and sampling on- and off-site monitoring wells, and conducting surface and subsurface soil sampling. In 1989, Iowa Electric found that the foundation for a gas holder was the main source of the groundwater contamination. The gas holder was removed and destroyed in the 1950s, and wastes were dumped or left in its place. An estimated 1,000 people live within 1 mile of the site; 9,000 live within 3 miles. The local drinking water supply depends on both surface water and groundwater and serves 11,000 people. There are 23 drinking water wells within a 3-mile radius of the site; the closest is 1,900 feet away. Shallow and deep groundwater wells are within 2 miles of the site. The closest well uses the shallow aquifer. Cedar Creek is less than 3 miles downslope of the site and is used for recreation.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

Threats and Contaminants



In 1985, the utility detected PAHs, including anthracene and pyrene from the coal gasification processes, in the groundwater near the site. On-site groundwater and soil contain VOCs such as benzene, toluene, and xylene, and the metals lead and mercury. Direct contact with contaminated soil and groundwater could pose a risk to public health.

Cleanup Approach

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

Response Action Status

Emergency Actions: Under EPA monitoring, the utility undertook an emergency cleanup action, installing a groundwater extraction system. Currently operational, it is designed to contain and treat the contaminated groundwater.

Groundwater and Soil: Also under the EPA's guidance, the utility completed an intensive study of groundwater and soil contamination at the site in 1990. The remedy selected includes excavating and incinerating contaminated soil and source areas, continuing the groundwater extraction and treatment system, and conducting a pilot study for possible in-place bioremediation of the contaminated groundwater. The potentially responsible party completed the technical design for the remedy in mid-1992 and began excavation in mid-1993. The bioremediation pilot study proved ineffective and was terminated in mid-1993. The groundwater extraction system achieved health-based standards set by the EPA and the State in early 1993 and was shut down. The excavation and incineration of soil and source areas is scheduled to continue until late 1995.

Site Facts: In 1989, Iowa Electric signed an Administrative Order on Consent with the EPA to conduct additional site investigations. The Utility signed a Consent Decree with the EPA in March 1991 to perform the technical design and undertake site cleanup activities.

Environmental Progress

Groundwater contamination has been addressed at the Fairfield Coal Gasification Plant site. Approximately 50 percent of contaminated source material and soil have been excavated. The EPA has determined that no immediate risks exist while cleanup of the contaminated soil is completed.

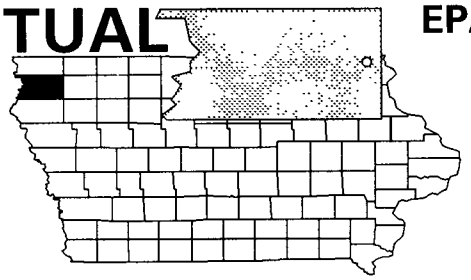
Site Repository

Fairfield Public Library, Court & Washington, Fairfield, IA 52556

FARMERS' MUTUAL COOPERATIVE

IOWA

EPA ID# IAD022193577



EPA REGION 7

Sioux County
Hospers

Site Description

The Farmers' Mutual Cooperative is an agricultural supply and service business that has operated at this 6-acre site since 1908. The cooperative lies along the eastern side of the Floyd River and currently stores bulk grain, fertilizers, and pesticides. In 1984, the Iowa Department of Environmental Quality found volatile organic compounds (VOCs), herbicides, and grain fumigant in two municipal wells in Hospers. The Iowa Department of Natural Resources prohibited the use of these two wells, in addition to a third well nearby. The Hospers municipal wells serve approximately 1,900 people and are within a 3-mile radius of the site. There are 109 deep and shallow wells and approximately 1,100 people within 3 miles of the Cooperative. The closest residence is approximately 100 feet away. Residents use the groundwater for drinking, irrigating crops, and watering stock.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

Threats and Contaminants

The groundwater and soil are contaminated with VOCs and various herbicides such as atrazine. Groundwater contaminants have polluted water under the Cooperative property and the closed public wells. A sample taken from the Floyd River indicated the presence of carbon tetrachloride and various pesticides. Although Hospers' public water supplies currently are not contaminated, public health could be harmed by drinking contaminated groundwater.

Cleanup Approach

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

Response Action Status

Entire Site: In 1987, the Cooperative, under State monitoring, began an intensive study of groundwater and soil pollution at and around the site. The investigation was intended to pinpoint the nature and extent of pollution problems and to recommend the best options for final cleanup. Field work and sampling at the site were completed in late 1991. The remedy, chosen in 1992, includes a water blending program for the City of Hospers' water supply, additional monitoring, and measures to reduce contaminants to meet drinking water standards, if necessary. Treatment or containment of the contaminants will also be implemented if testing demonstrates that drinking water standards cannot be met.

Site Facts: In 1986, the State issued an Administrative Order, requiring the Cooperative to conduct a study to determine the type and extent of the contamination and to identify cleanup alternatives. Partial results were submitted to the State in 1987, and negotiations culminated in a Consent Order, signed in 1987, providing for a groundwater study and completion of the site study.

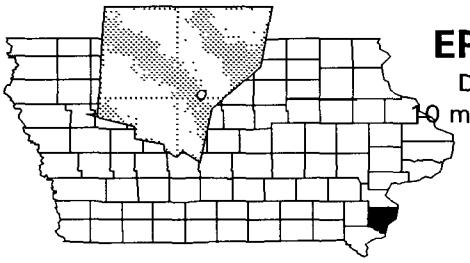
Environmental Progress

The EPA has determined that no immediate actions are required at the Farmers' Mutual Cooperative site to protect the health of the surrounding population while final cleanup is being planned.

Site Repository

Hospers City Hall, Hospers, IA 51238

IOWA ARMY AMMUNITION PLANT
IOWA
EPA ID# IA7213820445



EPA REGION 7
Des Moines County
10 miles west of Burlington

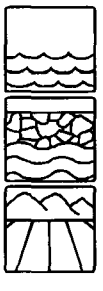
Site Description

The 19,127-acre Iowa Army Ammunition Plant (IAAP) site's primary activity since 1941 has been to load, assemble, and pack a variety of conventional ammunitions and fusing systems. Wastes currently produced at IAAP consist of various explosive-laden sludges, wastewater, and solids; lead-contaminated sludges; ashes from incineration and open burning of explosives; and waste solvents from industrial and laboratory operations. Past operations also generated waste pesticides; radioactive wastes, which have been removed from the site; and incendiaries. The Army has identified a number of potentially contaminated areas including the Line 800 Pinkwater Lagoon, an abandoned 4-acre settling lagoon which received wastewater containing explosives from 1943 to 1955. The lagoon now holds an estimated 37,000 cubic yards of hazardous sludges. A second area under investigation involves an earthen and concrete dam across Brush Creek, the former Line 1 impoundment, which was used from 1948 to 1957. Wastewater flowed through a 3 ½-acre sedimentation area where explosives settled out. The liquids then overflowed the dam into Brush Creek. Approximately 100 people live within 3 miles of the site and obtain drinking water from private wells within 3 miles of the base. Surface water within 3 miles downstream of the site is used for recreational activities.

Site Responsibility: This site is being addressed by the Army with oversight by the EPA.

NPL LISTING HISTORY
Proposed Date: 07/14/89
Final Date: 08/30/90

Threats and Contaminants



The Army conducted tests from 1981 to 1984 and detected explosives from former waste disposal practices in the lagoons as well as surface water and wells downgradient of the lagoon and dam. In 1984, the U.S. Army detected explosives and lead in creek sediments. People using Brush Creek for recreational purposes may be at risk due to contaminated waters and sediments. People who come into contact with or accidentally ingest contaminants may be at risk.

Cleanup Approach

This 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 Army has taken the opportunity to exercise removal action authority to implement interim response actions at selected areas of the site. The interim responses conducted in 1993 and 1994 include providing alternate water supplies to affected residences, and the removal of the pesticide pit and sump.

Entire Site: In 1990, the Army began a study to determine the nature and extent of contamination at the site and identified 43 individual areas requiring investigation. With the assistance of the EPA, samples were collected from these potential areas of contamination. After analyzing these samples, the EPA and the Army determined that approximately three-quarters of the sites needed further investigation. In the spring of 1993, the Army analyzed water samples from the wells of 54 residences located just south of the IAAP. Two of the wells were found to contain explosives at levels exceeding health advisory limits. The Army has offered alternate water supplies to all potentially impacted residents south of the IAAP and provided connections for all residents who so desired. The selection of a remedy for the initial group of sites is anticipated during 1995.

Site Facts: A Federal Facilities Compliance Agreement between the Army and the EPA was signed in 1988; an Interagency Agreement was negotiated in late 1990. The IAAP site is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DOD facilities.

Environmental Progress

Several interim response actions were performed in 1993 and 1994 that will ensure continued protection from site contaminants while final cleanup actions are being planned.

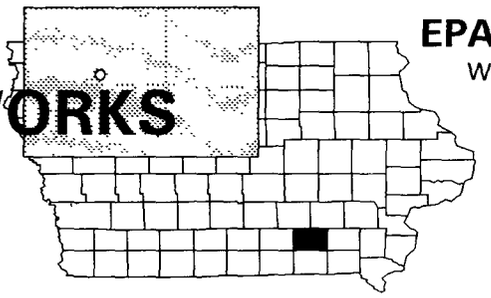
Site Repository

Main Administration Building, Iowa Army Ammunition Plant, Middletown, IA 52638
Danville Iowa City Hall, Danville, IA
Burlington Public Library, Burlington, IA

JOHN DEERE (OTTUMWA WORKS LANDFILLS)

IOWA

EPA ID# IAD005291182



EPA REGION 7
Wapello County
Ottumwa

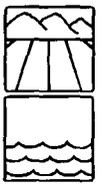
Site Description

The John Deere (Ottumwa Works Landfills) site consists of a 118-acre tract of land and has been used for the manufacture of farm implements since 1946. From 1911 until 1973, the company disposed of approximately 3,000 tons of solvents, paint sludges, acids, heavy metals, and cyanide on site. The site is located 200 feet from prime agricultural land. Approximately 700 people obtain drinking water from private wells within 3 miles of the site. The main water supply for Ottumwa, population 27,000, is the Des Moines River; the intake is 4,000 feet upstream from the John Deere landfills. The river also is used for recreational activities. The city's secondary water supply, which is used intermittently throughout the year, is Black Lake. It is located 500 feet downgradient of the on-site landfills.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 02/21/90

Threats and Contaminants



Low levels of various heavy metals from site disposal activities have been detected in the soil, surface water, and sediments. Also, low levels of methylene chloride, a volatile organic compound (VOC), were detected in the soil and sediments. Potential risks may have existed for individuals who accidently ingested or came in direct contact with contaminated soil and surface water.

Cleanup Approach

Response Action Status

Entire Site: Under EPA oversight, the John Deere Company began an investigation in 1990 to determine the type and extent of contamination. Field work was completed in late 1990, and the investigation was completed in late 1991. Based on the results of this investigation, the EPA selected a remedy requiring the John Deere Company to maintain the existing fence around the site, and to continue monitoring the groundwater to ensure that it remains safe. In addition, on the property and a State Highway right-of-way, deed restrictions now limit site use to non-residential activities. The operations and maintenance activities are scheduled to last into late 1996.

Site Facts: In 1989, John Deere Company entered into an Administrative Order on Consent with the EPA to conduct an investigation to determine the type and extent of contamination at the site and to identify alternative technologies for the cleanup. On September 25, 1992, John Deere Company and the Iowa Department of Transportation signed a Consent Decree with EPA to implement the selected remedy.

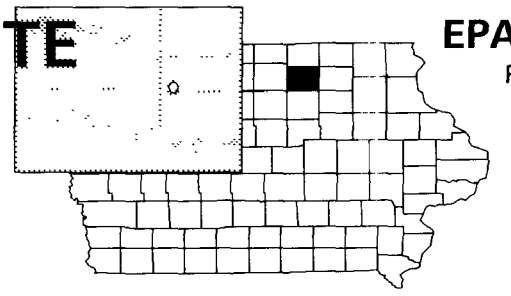
Environmental Progress

Intensive investigations of site conditions have shown that the site does not pose a significant threat to people and the environment. To ensure that there are no future threats, groundwater monitoring and land-use restrictions have been put in place. The EPA will continue to monitor the groundwater at the John Deere (Ottumwa Works Landfills) site to ensure that site conditions remain safe.

Site Repository

Ottumwa Public Library, 129 N. Court Street, Ottumwa, IA 52501

LABOUNTY SITE
IOWA
EPA ID# IAD980631063



EPA REGION 7
Floyd County
Charles City

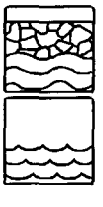
Site Description

The Labounty Site covers 8½ acres on the Cedar River flood plain. From 1953 to 1977, Salsbury Laboratories, a manufacturer of veterinary pharmaceuticals, disposed of over 6 million cubic feet of sludges containing various compounds and metals on the site. This has resulted in the contamination of a shallow groundwater aquifer that connects to the Cedar River. Investigations by the EPA and the Iowa Department of Environmental Quality in 1977 and 1978 revealed that major waste components were being leached and transported from the disposal site by groundwater to the Cedar River. The State of Iowa ordered the site closed in 1977. That same year, Salsbury constructed a 24-well groundwater monitoring system. Approximately 10,000 people live within 3 miles of the site. The nearest residence is 1,000 feet from the site. People in the area use groundwater in the adjacent aquifer for drinking water supplies.

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

NPL LISTING HISTORY
Proposed Date: 12/30/82
Final Date: 09/08/83
Deleted Date: 10/06/93

Threats and Contaminants



Volatile organic compounds (VOCs) and arsenic leached into the groundwater and surface water from the disposal site. Drinking contaminated surface water and groundwater or inhaling volatilized contaminants from the site were potential threats to individuals prior to cleanup.

Cleanup Approach

Response Action Status

Entire Site: The parties potentially responsible for the site contamination installed a groundwater monitoring system in 1979 and a clay cap in 1980. The capping has effectively reduced the leaching of wastes located above the water table. However, capping was not effective in reducing pollutant leaching where wastes were placed below the water table. Therefore, between 1985 and 1986 under EPA monitoring, the potentially responsible parties installed an upgradient groundwater diversion wall. The wall diverts groundwater around the fill material into the Cedar River. Salsbury continues to sample monitoring wells and the Cedar River. The EPA has conducted field sampling and reviews the site to ensure that the remedy remains protective. These operation and maintenance activities are scheduled to last into 1999.

Site Facts: The State of Iowa issued an Administrative Order in 1977 that required the owner, Salsbury Laboratories, to prevent runoff, cease operations, and submit a plan for the removal of wastes. In 1985, the EPA and Salsbury entered into an Administrative Order on Consent for the construction of the upgradient diversion wall and monitoring system in the upper and lower Cedar Valley aquifers.

Environmental Progress

All cleanup activities have been completed at the Labounty Site. The EPA and the potentially responsible parties will continue to test the effectiveness of the completed cleanup actions. The site was deleted from the National Priorities List (NPL) in 1993.

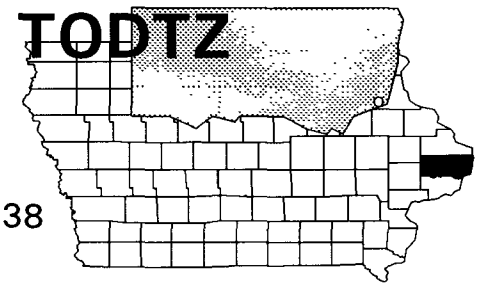
Site Repository

Contact the Region 7 Superfund Community Relations Office.

LAWRENCE TODTZ FARM

IOWA

EPA ID# IAD000606038



EPA REGION 7

Clinton County
1 mile west of Camanche

Other Names:
DuPont Company Landfill

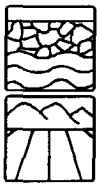
Site Description

The Lawrence Todtz Farm site is located in a predominantly agricultural area of Clinton and covers slightly over 6 acres. Municipal solid waste and industrial solid and liquid wastes were disposed of at the site from 1958 to 1975. The E.I. DuPont de Nemours Company, Inc.'s cellophane plant buried 4,300 tons of liquid waste at the site from 1972 to 1975. The wastes were reported to include strong acids and bases, plasticizers, resins, alcohols, inorganic salts, paints, and pigments. The site was closed in 1975 and capped with approximately 2 feet of "red sugar" clay and topsoil overlay. One hundred people live within 1 mile of the site. Within ¼ mile of the site are 10 farmhouses with private wells for drinking water and approximately 12 mobile homes. Murphy's Lake (formerly Willow Lake) and Bandixen Lake, located near the site, are used for recreational activities such as fishing and swimming. Two chemical industrial plants are located within a mile of the landfill. Evidence of deer, raccoon, and cattle has been seen on the site. Wild geese were observed on the site and the surrounding lakes.

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

NPL LISTING HISTORY
Proposed Date: 09/05/85
Final Date: 06/10/86

Threats and Contaminants



Groundwater samples from on-site monitoring wells detected heavy metals including arsenic, barium, and lead; sodium; and volatile organic compounds (VOCs) including tetrahydrofuran, benzene and toluene from the former waste disposal activities on the site. Sodium was detected at levels above health guidelines in groundwater samples collected from area residential wells. Analyses of soil samples collected in 1988 detected arsenic at levels that may have posed adverse health effects. Contamination of surface water (on-site ponds and nearby lakes) could have occurred if there had been a release from the impoundment, because the lakes are hydraulically connected to the shallow sand and gravel aquifer.

Cleanup Approach

Response Action Status

Entire Site: The parties potentially responsible for the site contamination installed an alternate water supply that included drilling a new well to supply water to three area residents. This was completed in the summer of 1989. Under the EPA's oversight, the potentially responsible parties have graded the site area, constructed a 2-foot soil cover over the impoundment, and installed a groundwater monitoring system. These activities were completed in 1991. Monitoring of the impoundment and municipal landfill will continue to ensure the long-term effectiveness of the cleanup activities.

Site Facts: In November 1990, a Consent Decree between the EPA and the potentially responsible parties was entered in court. Under this Decree, the parties agreed to perform long-term cleanup of the site.

Environmental Progress

The installation of an alternate water source, the construction of a 2-foot soil cover, and the construction of a groundwater monitoring system with chemical-specific action levels have significantly reduced the potential for exposure to contaminated soil and groundwater at the Lawrence Todtz Farm site.

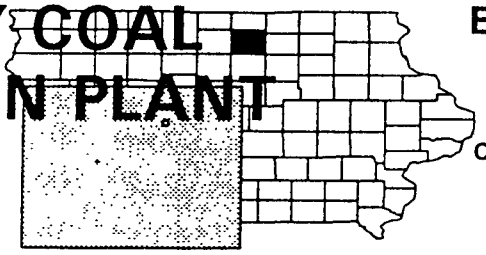
Site Repository

Clinton Main Library, 306 Eighth Avenue, South Clinton, IA 52732
Camanche Public Library, 102 12th Avenue, Camanche, IA 52730

MASON CITY COAL GASIFICATION PLANT

IOWA

EPA ID# IAD980969190



EPA REGION 7

Cerro Gordo County

OTHER NAMES:
Coal Gasification Plant

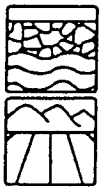
Site Description

The Mason City Coal Gasification Plant site is located on approximately 2 1/3 acres in a commercial and residential area of central Mason City, a north-central Iowa community of 29,000. Mason City Coal Gasification Plant operated from 1900 to 1951 and was demolished in 1952. An electrical substation and a small storage building are all that remain on the site. During a 1984 sewer installation, oily sludges were discovered in subsurface soil at the site. Investigations by the current site owner, Interstate Power Company (IPW), revealed three underground storage tanks containing oily sludge. The tanks and excavated soil were exhumed and stored on the southeast corner of the site and covered with a membrane cap. Contaminated soil is also present in the north-central portion of the site. The site is situated on fill material consisting of sand, gravel, and construction rubble and debris, and is in direct contact with bedrock. Although the level of the water table fluctuates seasonally, the water table in the fill material is typically present at depths ranging from 8 to 10 feet below the surface. A portion of the groundwater flows through the fill and empties into Willow Creek, which is used for public recreational fishing. Eight Mason City municipal drinking water wells are located within 2 miles of the site. Approximately 98 percent of Mason City is supplied by the municipal drinking water supply.

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

NPL LISTING HISTORY
Proposed Date: 01/18/94

Threats and Contaminants



The soil, on-site waste pile, bedrock, and groundwater are contaminated with polynuclear aromatic hydrocarbons (PAHs). Soil samples collected indicate that the soil is contaminated to a depth of 13 1/2 feet. A series of investigations between 1986 and 1989 by IPW identified high concentrations of PAHs in samples of groundwater taken from the uppermost aquifer and in samples of Willow Creek sediment downstream from the site. Ingesting or touching contaminated soil or groundwater could pose a public health threat.

Cleanup Approach

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

Response Action Status

Initial Actions: In late 1988, the potentially responsible party excavated three underground storage tanks and surrounding contaminated soil, moved them to the southeast corner of the site, and covered them with a membrane cap.

Entire Site: In late 1991, the potentially responsible parties undertook a study of the nature and extent of site contamination. This study, scheduled for completion in late 1994, will help to define cleanup alternatives for the site.

Site Facts: IPW signed an Administrative Order on Consent with the EPA in October 1991. Under this order, IPW agreed to determine the extent of contamination at the site and assist the EPA in evaluating cleanup options.

Environmental Progress

The removal of several storage tanks and the contaminated soil around them has made the Mason City Coal Gasification Plant site safe while site studies are underway.

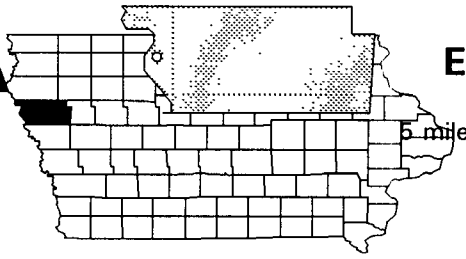
Site Repository

Mason City Public Library, 225 2nd Street S.E., Mason City, IA 50401

MID-AMERICA TANNING CO.

IOWA

EPA ID# IAD085824688



EPA REGION 7

Woodbury County

5 miles south of Sergeant Bluff

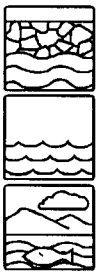
Site Description

The Mid-America Tanning Company site, located south of Sergeant Bluff, covers approximately 100 acres and has processed hides under several names since 1969. In 1979, the Mid-America Tanning Company discharged an estimated 1,000 cubic yards of tannery sludges containing chromium into two unlined trenches on the property. U.S. Tanning acquired the operation in 1985. Wastes were treated on site. Solids were settled out in concrete-lined basins and unlined impoundments, while liquids were chemically treated and then discharged into an oxbow lake. The site is in the Missouri River flood plain. Approximately 85 people live within a mile of the site, and 850 people live within 3 miles.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 03/30/89

Threats and Contaminants



Monitoring wells on site show that the groundwater is contaminated with heavy metals including arsenic, barium, chromium, lead, and cadmium from the former process waste disposal practices. The sediments and surface water of the oxbow lake contain elevated levels of heavy metals. The groundwater, used by local residents as a drinking water supply, may be polluted with heavy metals; drinking such tainted water could be hazardous to public health. About 2 miles south of the site is a wetland used as a nesting site for the piping plover, an endangered species.

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 1990, the EPA removed approximately 1,300 cubic yards of contaminated soil and sludge from on-site burial pits. This material later will be immobilized as part of the final cleanup remedy. The EPA also removed any raw materials found on site and recycled them, where possible. These initial actions were completed in late 1991.

Entire Site: Due to financial difficulties encountered by the potentially responsible party in early 1990, the EPA had to initiate studies into the nature and extent of contamination at the site. The EPA completed these investigations in late 1991 and chose the following remedy: on-site immobilization of heavily contaminated soil and sludge and capping of contaminated areas. Design of these cleanup remedies began in 1992 and were completed in September 1993. Cleanup activities are expected to begin in 1995.

Site Facts: The EPA issued a Unilateral Administrative Order to the potentially responsible party in late 1989 to perform an investigation of site contamination. Due to financial difficulties, the party did not comply with the initial actions specified in the Order.

Environmental Progress

The EPA has completed initial actions to address elevated levels of cadmium, arsenic, barium, and lead in the groundwater by excavating and consolidating buried sludges, abandoned chemicals, and tanning solutions. These actions will contain the source of contamination and will reduce the potential for direct contact with hazardous wastes on site until final cleanup is conducted.

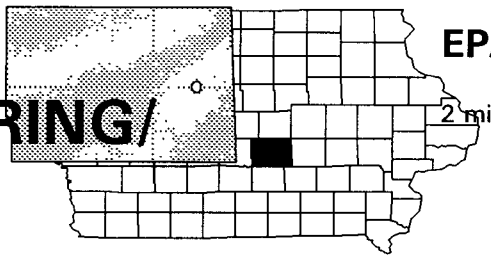
Site Repository

Sergeant Bluff City Hall, 401 Fourth Street, Sergeant Bluff, IA 54054

MIDWEST MANUFACTURING/ NORTH FARM

IOWA

EPA ID# IAD069625655



EPA REGION 7

Jasper County
2 miles north of Kellogg

Other Names:
North Farm
Smith-Jones

Site Description

The Midwest Manufacturing/North Farm site consists of two areas: North Farm, which is an unlined disposal cell located 2 miles from the plant; and Midwest Manufacturing, which is the plant facility. The two areas were combined into the same site because they contain the same types of wastes and affect the same population. From 1973 to 1981, under Smith-Jones ownership, the plant was engaged in electroplating special-order stamped metal pieces, a process that involved using various heavy metals, such as nickel, zinc, and cadmium. Prior to a wastewater treatment plant being brought on line in 1977, the electroplating waste from the plant was discharged directly into the North Skunk River. From 1977 to 1978, the sludge produced by this process was disposed of in an unlined cell at the North Farm area. From 1979 to 1981, trenches at the Midwest Manufacturing area near the plant received the sludge produced by the treatment process. In 1982, the EPA collected sludge samples from the disposal trenches at both areas. Cadmium was the only metal which was found to be present in the soils above naturally-occurring levels. No elevated metals were present in soil samples taken from the North Skunk River downgradient from the plant. A groundwater sample collected from Well #1 was found to contain levels of zinc less than the proposed level for lifetime exposure. During the EPA's 1987 site visit, a man-made drainage ditch was discovered to the west of the disposal trench at the plant. The sediments in this ditch were covered with a black, oily substance that had a petroleum odor. Stressed vegetation and an oily substance floating on top of the water were observed in a marshy area located on the western end of the plant property. In a 1989 site visit, it was noted that the drainage ditch had been covered and a plastic drain pipe had been placed in bottom of the ditch. The plant currently manufactures high-speed flywheel ring gears and assemblies for automobiles. Approximately 700 people depend on wells located within 3 miles of the site for their drinking water supply.

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

NPL LISTING HISTORY
Proposed Date: 09/05/85
Final Date: 06/10/86

Threats and Contaminants

During sampling in 1982, the Midwest Plant city well #1 showed elevated levels of zinc from the former waste disposal activities. Groundwater samples from plant site monitoring wells found elevated levels of volatile organic compounds (VOCs) such as vinyl chloride, trichloroethylene, and dichlorothylene and the heavy metals cadmium and nickel. Surface soils at both areas contain elevated levels of heavy metals. Adverse health effects could result from ingesting vegetables grown on contaminated soils or watered with contaminated groundwater. In the event that contaminated groundwater were to be consumed, the site may pose a health risk to area residents.

Cleanup Approach

This site is being addressed in two long-term remedial actions focused on the cleanup of the Midwest Manufacturing Area and the North Farm Area.

Response Action Status

Midwest Manufacturing Area: The EPA concluded a study of the nature and extent of contamination of the area in 1990. The 1991 remedy included installation of a groundwater extraction and treatment system and capping of the plant site disposal trench. The EPA conducted a pump test in preparation for the cleanup design and determined that the aquifer was less permeable than previous data indicated, which lengthens the cleanup time and increases the site cleanup costs. Subsequently, the EPA amended the remedy to include deed restrictions, installation of groundwater monitoring wells, perimeter fencing and regular groundwater sampling of both monitoring wells and supply wells within a 1 mile radius of the plant site. Design of the cleanup was completed in early 1992. Cleanup activities are expected to begin in 1995.

North Farm Area: The EPA concluded a study of the nature and extent of contamination of the area in 1988. The 1988 remedy included removal of soils containing cadmium above the concentration of 13 mg/kg. The EPA has re-evaluated risk data and determined that the site, in its present conditions, poses no current risk to human health and the environment. Future risks can be prevented by using institutional controls which would prohibit certain future land use, such as vegetable gardening and prevent the installation of a water supply well. EPA amended the remedy selection to include deed restrictions and groundwater monitoring of the three existing monitoring wells. Design of the cleanup was completed in mid-1991. Cleanup activities are expected to begin in 1995.

Environmental Progress

The EPA has determined that the site required no immediate actions to reduce the potential for exposure to contaminants while final cleanup remedies are being planned. The EPA will monitor the progress of the cleanup actions to determine whether they remain protective of human health and the environment.

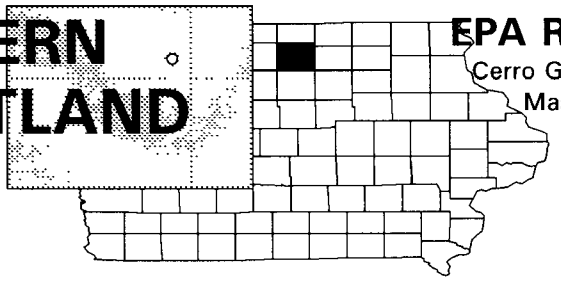
Site Repository

Kellogg City Library, Kellogg City Hall, Kellogg, IA 50135

NORTHWESTERN STATES PORTLAND CEMENT CO.

IOWA

EPA ID# IAD980852461



EPA REGION 7
Cerro Gordo County
Mason City

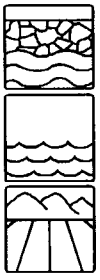
Site Description

The Northwestern States Portland Cement Co. (NWSPCC) site covers 150 acres of a 250-acre parcel of land in Mason City. The NWSPCC began limestone mining operations in 1908. The company ceased the mining in 1950 and abandoned the quarry west of the plant. In 1969, the NWSPCC began to use the quarry for the disposal of waste kiln dust containing hydroxides, potassium, chromium, and sulfates. An estimated 2 million tons of waste kiln dust were disposed of in the quarry. Over the years, the water level rose approximately 2 feet per year, filling in the quarry so that it held approximately 420 million gallons of water. Rainwater runoff drains from the quarry into adjacent Calmus Creek, a tributary of the Winnebago River. The Iowa Department of Natural Resources (IDNR) conducted an investigation in 1984, when a citizen became concerned over the Winnebago River turning white. Calmus Creek was found to have a higher than normal pH level. The Mason City municipal wells are within 3 miles of the site and serve approximately 30,000 people. About 300 people obtain their drinking water from private wells within 1½ miles of the site. The municipal wells are connected to the deep Jordan aquifer. The private wells are served by the Cedar Valley aquifer. Calmus Creek and the Winnebago River are used for recreational activities, including fishing.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

Threats and Contaminants



The groundwater is contaminated with sulfates, sodium, and elevated pH from the former process waste disposal practices at the site. Although the groundwater is contaminated, municipal and private drinking water wells are not polluted. If the contaminant plume had migrated from Calmus Creek and into the Cedar Valley aquifer, the private wells could have become contaminated and pose a health hazard to people who use them. Sediments and soils are contaminated with higher than normal pH. Calmus Creek is contaminated with higher than normal pH, and people who use the creek for recreation or eat fish from it may be at risk. The increased pH found in soil, sediments, and surface water of the quarry is considered caustic; therefore, coming in direct contact with these substances would pose a health risk.

Cleanup Approach

Response Action Status

Initial Actions: The State ordered the NWSPCC to stop discharges into Calmus Creek, and the company complied by installing a system that intercepts the flow and pumps the water back into the quarry. In 1987, the company began treating the surface water before discharging it into the creek.

Entire Site: The NWSPCC has pumped most of the water from the quarry. The NWSPCC also conducted an investigation, under State supervision, to determine the extent of contamination at the site. The investigation was completed in 1990. Based on the results of the investigation, EPA selected a cleanup remedy. Along with pumping the water from the quarry, the remedy includes construction of a permanent drain system in the quarry to collect precipitation runoff and groundwater inflow; installation of a cap over the quarry area filled with waste kiln dust to minimize infiltration through to kiln dust; installation of bedrock dewatering wells to collect contaminated groundwater to prevent migration of contaminated groundwater, and to maintain groundwater levels; installation of kiln dust dewatering wells, if necessary; treatment of contaminated waters and final discharge into Calmus Creek; and continued operation of a dewatering system. The design of these technologies by the NWSPCC began in 1991 and was completed in late 1992. Construction of site remedies was completed in 1993.

Site Facts: In 1985, the State issued an Administrative Order to the NWSPCC to stop discharges into Calmus Creek. In addition, the Order instructed the company to conduct a study, under State supervision, to determine the effect of the quarry on the environment. This study was completed in 1987. In 1989, the State issued an Administrative Order to the NWSPCC to conduct an additional site study, which was completed in 1990.

Environmental Progress

All construction at the site is complete. Pumping the water from the quarry and treating surface water prior to release to Calmus Creek has reduced the potential for exposure to contaminated water and sediments at the Northwestern States Portland Cement Co. site while operation of the dewatering system continues.

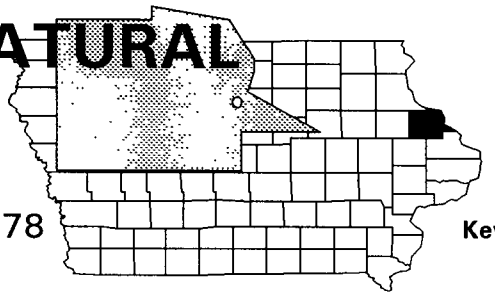
Site Repository

Mason City Public Library, 225 Second Street, Mason City, IA 50401

PEOPLES NATURAL GAS CO.

IOWA

EPA ID# IAD980852578



EPA REGION 7

Dubuque County
East Dubuque

Other Names:
Key City Coal Gasification Plant

Site Description

The Peoples Natural Gas Co. site is located in Dubuque and covers approximately 5 acres. From 1890 until 1954, the Key City Gas Company owned and operated this gas plant, where a natural gas substitute was produced from coal. In 1954, the North Central Public Service Company took over operations until 1957, when Peoples Natural Gas Company assumed ownership of the site. Peoples used the site as a storage and maintenance area and did not manufacture gas. It later sold a portion of the site to the City of Dubuque, which operates the Dubuque Municipal Garage on the site. The Iowa Department of Transportation owns the remainder of the site. Two waste products resulting from coal gasification are of primary concern: coal tar sludges and spent iron oxide. Coal tar sludges were produced during the coal or coke combustion and during the oil injection processes, and spent iron oxide wastes were produced during the gas purification process. Spent iron oxide wastes, removed from the three gas cleaning boxes (purifiers), were dumped behind two gas holding tanks on the site at least twice a year. Spent iron oxide and other wastes were deposited in the northeastern section of the site. Coal tars were removed from the gas in the wash box and condenser. These wastes either were sold or disposed of in pits or holding tanks. Two coal tar waste storage tanks were used at the Key City plant, one aboveground and one below. Both tanks have been removed. Evidence of materials left in the underground tank, as well as migration of waste out of the tank, is supported by a study done by the Iowa Department of Transportation in 1983 while conducting a right-of-way survey for the proposed extension of U.S. 61. An estimated 60,000 people obtain drinking water from municipal wells within 3 miles of the site. Approximately 2,400 people live within a mile of the site, and 21,000 people live within 3 miles. The Mississippi River is approximately 500 feet east of the site. Surface water downstream is used for industrial and recreational activities. A wildlife and fish refuge is 2 miles downstream, and wetlands are within ½ mile of the site.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

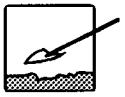
Threats and Contaminants

Phenols, polycyclic aromatic hydrocarbons (PAHs), and inorganic chemicals from the gasification process wastes were detected by the State in on-site wells. Soil samples collected at the site in 1983 also contained phenols, PAHs, and inorganic chemicals. Accidental ingestion of or direct contact with contaminated soil or groundwater may pose potential health threats to individuals. No private drinking water wells have been identified in the area. The wetlands and the wildlife and fish refuge may be threatened by runoff from the site.

Cleanup Approach

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

Response Action Status



Immediate Actions: Under EPA oversight, potentially responsible parties for the site contamination removed the contaminated coal tar sludges and soils containing contaminants above human-health standards from within the construction corridor for U.S. Highway 61. Contaminated soil currently is being incinerated off site. Incineration of these soils is expected to continue through late 1994.

Soil and Groundwater: A study of the extent and type of groundwater and soil contamination also was completed by the potentially responsible parties. A remedy that requires excavation and incineration of contaminated soils, and pumping and treating contaminated groundwater, was selected in 1991. Restrictions on land and groundwater use also will be implemented. Design of the remedy was completed in early 1994. Excavation of contaminated soils for the remaining portion of the site will be initiated in the spring of 1995 and is scheduled to be completed in late 1996.

Site Facts: The EPA signed an Administrative Order on Consent with Midwest Gas (of Iowa Public Service, a successor corporation of Key City Gas Co.), the Iowa Department of Transportation, and the City of Dubuque in 1989. The Order required the parties to remove or treat any contaminated soil. It also required completion of an investigation to determine the need for treatment of residual soil and for groundwater treatment. The EPA signed a Consent Decree with Midwest Gas, the Iowa Department of Transportation, the City of Dubuque, and Enron on December 28, 1992, which requires the parties to conduct the design of the remedy and cleanup activities.

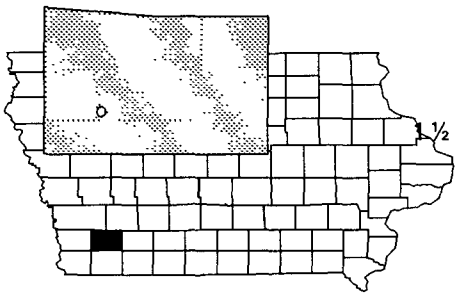
Environmental Progress

By removing contaminated coal tar sludges and soils, the potential for exposure to hazardous materials at the People's Natural Gas Co. site has been reduced while final cleanup activities are underway.

Site Repository

Carnegie Stout Public Library, Eleventh and Bluff, Dubuque, IA 52001

RED OAK LANDFILL
IOWA
EPA ID# IAD980632509



EPA REGION 7
Montgomery County
1½ miles northwest of Red Oak

Other Names:
Union Carbide Disposal

Site Description

The 40-acre Red Oak City Landfill site is an inactive landfill located within an old limestone quarry in a rural setting. Of the 40 acres, 20 acres were used for disposal. The landfill is bounded on the west by Parkwest Road and on the east by the East Nishnabotna River. Quarrying activities at the site were conducted by strip mining from the late 1940s to the early 1960s. The City of Red Oak purchased the site property in 1962 and converted it into a municipal landfill. From 1962 until 1974, municipal waste and industrial waste including hazardous substances were deposited in the landfill. There is a thin layer of soil covering the landfill, and at some points, waste materials, including 55-gallon drums, are exposed to the surface. The eastern portion of the landfill, adjacent to the East Nishnabotna River, is being eroded as a result of river bank undercutting and surface water runoff. Approximately 7,000 people within 3 miles of the site depend on groundwater as a source of drinking water. The nearest residence uses a private well 1,800 feet away from the landfill. There are 250 people living within a mile of the site.

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

NPL LISTING HISTORY
Proposed Date: 06/10/86
Final Date: 03/13/89

Threats and Contaminants

VOCs including toluene and xylene and heavy metals including chromium, lead, and barium from the landfilling practices have been detected in the soil, groundwater, and surface water at low concentrations. The sediments near the landfill contain toluene. Ingestion or direct contact with the contaminated groundwater, surface water, soils or sediments could be hazardous. The landfill is situated in permeable soil, which increases the chances of the groundwater becoming contaminated.

Cleanup Approach

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

Response Action Status

Entire Site: The investigative work to determine the extent and nature of the contamination on site originally was begun by the EPA and then taken over by the potentially responsible parties. This investigation was completed in July 1992, which resulted in the EPA choosing capping of the landfill as the preferred remedy in 1993. Design activities are scheduled to begin in 1994.

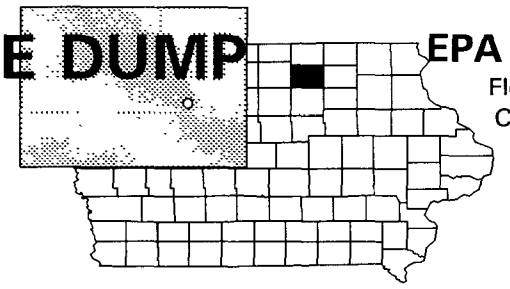
Environmental Progress

After placing the Red Oak Landfill site on the NPL, the EPA determined, after a preliminary assessment of site conditions, that no immediate actions were required while final site cleanup activities are being planned.

Site Repository

Red Oak Public Library, Second and Washington, Red Oak, IA 51566

SHAW AVENUE DUMP
IOWA
EPA ID# IAD980630560



EPA REGION 7
Floyd County
Charles City

Site Description

The Shaw Avenue Dump site, an 8-acre city dump, is located in southeastern Charles City, approximately 500 feet east of the Cedar River. The City owns the site and operated it as a municipal waste dump without a permit. Two areas in the northern half of the site were used from 1949 to 1953 to dispose of 14,000 to 28,000 cubic feet of arsenic-contaminated solid waste generated by Salsbury Laboratories in the production of animal pharmaceuticals. Sludge from the Charles City wastewater treatment plant, which received liquid wastes discharged from Salsbury, was placed in the northern waste cells and in an undefined area on the southern portion of the site. The northern disposal area no longer is in use and has been covered with soil and vegetated. Between the southern and northern areas, trenches were used for disposing of lime sludges from the drinking water treatment plant. The City and the public used this area for open burning of wastes. The site is within a large residential area. A high school is located approximately 1,000 feet north of the site. Students use a stadium within 500 feet of the northern waste disposal cells. One residence, 1,500 feet southeast of the site, uses a private well for domestic purposes. The Charles City municipal water supply system, within 2 miles uphill of the site, serves 8,800 people. The Cedar River flows through Charles City and is used for recreational fishing, swimming, and canoeing.

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

NPL LISTING HISTORY
Proposed Date: 09/05/85
Final Date: 07/22/87

Threats and Contaminants

The groundwater and soils are contaminated with arsenic from the disposal site. The Cedar River also is contaminated with arsenic. Direct contact with contaminated soil, groundwater, and surface water may pose a health risk. The site is surrounded by a fence with no-trespassing signs and a locked gate.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on cleanup of chemical fill and contaminated soil, and cleanup of the groundwater.

Response Action Status

Chemical Fill and Contaminated Soil: The EPA began an investigation of the site and its cleanup alternative in 1987. The parties potentially responsible for site contamination took over the investigation in 1988 and completed it in late 1991. In early 1992, the potentially responsible parties began cleanup activities. The remedy initially called for stabilization of chemical fill and contaminated soil, however, treatability tests indicated that stabilization would not be effective. All contaminated materials have now been removed off site to a federally-approved landfill as described in the contingency remedy. Cleanup of the contaminated soil and chemical fill was completed in early 1994.

Groundwater: An investigation of the nature and extent of groundwater contamination is expected to begin in 1997, and will result in the selection of final cleanup remedies.

Site Facts: In March 1987, the EPA sent letters notifying Salsbury Laboratories and Charles City of their potential responsibility and requested information about their use of the site. A Consent Order was completed on May 26, 1988. Under this Order, the potentially responsible parties were required to conduct an investigation to determine the type and extent of contamination on the site.

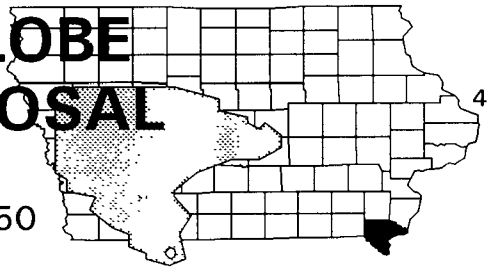
Environmental Progress

The removal of contaminated soils from the Shaw Avenue Dump site has reduced the risk of exposure to hazardous materials pending the start of investigations that will lead to the selection of a groundwater remedy.

Site Repository

Charles City Public Library, 106 Milwaukee, Charles City, IA 50616

SHELLER-GLOBE CORP. DISPOSAL
IOWA
EPA ID# IAD980630750



EPA REGION 7
Lee County
4 miles northwest of Keokuk

Other Names:
Grimes Property

Site Description

Sheller-Globe Corp. operated an industrial landfill and solvent burning area from 1947 to 1970. The 5-acre site was filled in and sold in 1980 to an individual who built a home on it and drew water from a 300-foot-deep on-site well. The water from the well contains lead and zinc, possibly from the distribution lines. The homeowner permanently relocated in the fall of 1991. The site is no longer used for residential purposes. In the past, the Sheller-Globe Corporation manufactured rubber products, including automobile weather stripping, at a facility located in Keokuk. Liquids, sludges, and rubber stripping from the operation were deposited on site with no system for diverting surface runoff. According to the company, among these wastes were at least 1,000 drums of paint sludge, volatile organic compounds (VOCs), isopropyl alcohol, and resins containing fluorocarbons. Waste material, including solvents was routinely burned in the open and buried. In 1987, the EPA found heavy metal and VOC contamination in soil, groundwater, and surface water during testing. Previously, an estimated 1,125 people obtained their drinking water from private wells within 3 miles of the heavily wooded rural site. Most people now obtain drinking water recently made available from one of two rural water districts.

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

NPL LISTING HISTORY
Proposed Date: 05/05/89
Final Date: 08/30/90

Threats and Contaminants

On site soils are contaminated with heavy metals including arsenic, chromium, lead, nickel, and zinc and organics from the former disposal activities. Accidental ingestion of contaminated soil may cause a potential health threat.

Cleanup Approach

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

Response Action Status

Entire Site: In 1990, an investigation of the site and the possible cleanup alternatives was started by the potentially responsible parties. Investigations to date have included sampling of surface and subsurface soils, surface water, glacial till groundwater, and bedrock groundwater. Field work is expected to be completed in early 1995.

Site Facts: An Administrative order on Consent, requiring the potentially responsible parties to conduct site studies, was signed October 18, 1990.

Environmental Progress

Following listing of the Sheller-Globe Corp. Disposal site on the NPL, the EPA determined, after an initial evaluation of the site conditions, that the site did not require any immediate actions while studies leading to the selection of a final cleanup remedy are taking place.

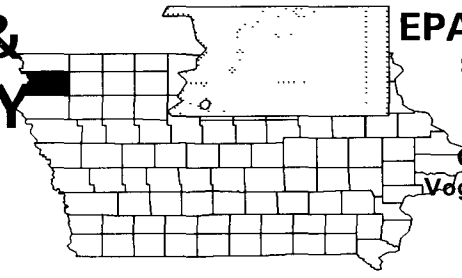
Site Repository

Contact the Region 7 Superfund Community Relations Office.

VOGEL PAINT & WAX COMPANY

IOWA

EPA ID# IAD980630487



EPA REGION 7

Sioux County
Orange City

Other Names:
Vogel Disposal Site

Site Description

Vogel Paint & Wax Company used a 2-acre sand and gravel pit within an 80-acre parcel of land for disposal of its paint and varnish production wastes. From 1967 to 1979, the site received paint wastes containing heavy metals, volatile organic compounds (VOCs), and mineral spirits. Liquid wastes were dumped into several trenches from 8 to 12 feet deep. The trenches were left open for extended periods to allow for evaporation. Partially filled and full drums and other debris were dumped on top of the liquid wastes. The trenches eventually were covered with 1 to 2 feet of soil. The company has conducted numerous investigations in conjunction with the Iowa Department of Natural Resources (IDNR) to determine the extent of the pollution. The site lies in a primarily agricultural area. Maurice, with a population of 288, is located 2 miles northeast of the site. Struble is 3 miles south of the site and has a population of 59. The Southern Sioux County Rural Water System well field, located approximately 2 miles downstream of the site, serves 3,200 people. Within 1,600 feet upstream of the disposal site is an agricultural well and a residential well used for drinking water.

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 heavy metals including cadmium, chromium, lead, and mercury and VOCs such as benzene and xylene from the former disposal activities. The soil and surface water are contaminated with heavy metals. Any contaminated soil above the waste trench area may be a potential health hazard if airborne dust is inhaled or direct contact is made with the contaminants in the soil. Contaminated surface water could affect plant and animal life.

Cleanup Approach

Response Action Status

Initial Action: As a preliminary action, a 2-foot thick clay cap was placed over the disposal area, and floating hydrocarbons are removed from the top of the water table on a monthly basis. This action has reduced the floating hydrocarbons from 2 feet down to only intermittent presence.

Source Control: After evaluating alternative cleanup methods, the EPA selected a remedy for source control. The potentially responsible parties are excavating contaminated soils and separating solid and liquid waste for off-site incineration, recycling, or disposal. An estimated 30,000 to 50,000 cubic yards of contaminated soils are being treated using a bioremediation process in surface impoundment units. Treated soil will be placed back into the excavation area and covered. Leaching standards for soils have been established. The potentially responsible parties completed design activities for the cleanup in 1991. Site cleanup activities began immediately thereafter. Construction was completed in August 1994. The soils system is now in the operation and maintenance phase, which is expected to last into 1997.

Groundwater: To address groundwater contamination, the EPA chose pumping and air stripping contaminated groundwater, with discharge to the nearby stream. VOCs are released into the atmosphere from the groundwater treatment process. Health-based standards for groundwater were established. The potentially responsible parties began construction of the treatment system in 1991. Construction was completed in October 1992. The groundwater system is now in the operation and maintenance phase, which is expected to last through at least 1999 to reach established health-based standards.

Site Facts: The site currently is listed on the State Abandoned or Uncontrolled Sites Registry (SAUSR). Substantial changes or transfer of property on this registry is prohibited without written approval of the Director of the IDNR.

Environmental Progress

By placing a cap over the areas of greatest contamination, removing the floating contaminants from standing water, implementing the groundwater treatment system, and implementing the source control remedy, the Vogel Paint & Wax Company site no longer poses an immediate threat to the public or the environment.

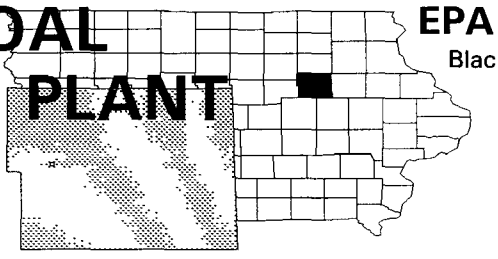
Site Repository

Orange City Public Library, 112 Albany Avenue, S.E., Orange City, IA

WATERLOO COAL GASIFICATION PLANT

IOWA

EPA ID# IAD984566356



EPA REGION 7
Blackhawk County
Waterloo

Site Description

The former Waterloo Coal Gasification Plant manufactured gas for lighting and heating purposes from 1901 to 1956 in Waterloo, Blackhawk County, Iowa. When operational, the coal gasification operation occupied approximately 4 1/2 acres. The majority of the site is located along the Cedar River, south of Sycamore Street between Union and Elm Streets. A railroad right-of-way runs through this portion of the site. Plant diagrams also indicate that an area located north of Sycamore Street and east of Union Street housed gas holders. During the time period that operations occurred, several power companies held title to the parcels that comprise the site. Since discontinuation of operations in 1956, certain parcels have been sold to public and private parties. The majority of the site is presently owned by a utility company, Midwest Power Systems, Inc., a subsidiary of Midwest Resources, Inc. The plant was dismantled between 1964 and 1967. Two waste streams generally associated with manufactured gas plant sites are of primary concern: coal tar residuals from the gasification process and cyanide residuals from the purification process. Exact disposal methods for these wastes are unknown; however, initial investigations indicate soil and groundwater contamination. The nearest downgradient bedrock wells servicing Waterloo and nearby Evansdale are located 1 3/4 miles south and 3 miles southeast of the site, respectively. Approximately 74,800 people obtain drinking water from public and private wells located within a 4-mile radius of the site. The Cedar River is used for recreational activities and wetlands are located downriver of the site.

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

NPL LISTING HISTORY
Proposed Date: 10/14/92

Threats and Contaminants

Polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and cyanide have been detected in on-site surface and subsurface soils. PAHs, VOCs, and cyanide have also been detected in shallow groundwater samples collected from on-site monitoring wells. Accidental ingestion of or direct contact with contaminated soil or groundwater may pose potential health threats to individuals. The potential also exists for adverse impacts on wetlands and associated wildlife due to contaminant migration from the site to the Cedar River.

Response Action Status

Initial Actions: Midwest Gas agreed to develop the necessary work plans and conduct a removal action to identify, excavate, process, and incinerate or dispose of all coal tar, visibly contaminated coal tar-impacted soils and source material. EPA will review the documents prepared by Midwest Gas and provide oversight during certain stages of on-site activities. A comprehensive public and private well survey also will be conducted by Midwest Gas. Site preparation, test trenching, excavation and soil processing activities were initiated in the summer of 1994. Cleaned structural debris will be disposed of at the Blackhawk County Sanitary Landfill. The processed soil will be transported to the George Neal Electrical Generating Station in Sioux City, Iowa for incineration. The majority of the source material is expected to be excavated, processed, and transported off-site during the fall of 1994 and the spring of 1995.

Entire Site: An investigation into the nature and extent of contamination is being scheduled. After the investigation is completed, EPA will select a final remedy to cleanup the site.

Site Facts: This site is being addressed under the Superfund Accelerated Cleanup Model (SACM) approach. EPA and Midwest Gas signed an Administrative Order on Consent (AOC) on December 29, 1993 to perform removal actions at the site.

Environmental Progress

Initial actions being under taken at the Waterloo Coal Gasification Plant site are protecting the health of the nearby population and the integrity of the environment while a full-scale study into site conditions is being planned.

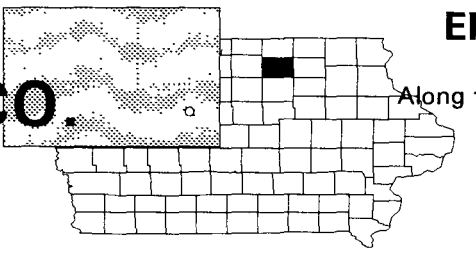
Site Repository

Not yet established.

WHITE FARM EQUIPMENT CO. DUMP

IOWA

EPA ID# IAD065210734



EPA REGION 7

Floyd County

Along the northern boundary of Charles City

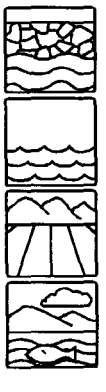
Site Description

The White Farm Equipment Co. Dump site occupies approximately 20 acres along the northern border of Charles City. The dump is located in an old sand and gravel pit that is bordered by low-lying areas and farmland. Tractors and other farm equipment have been manufactured near the dump since the early 1900s. White Farm Equipment operated on land leased from H.E. Construction Co. until it filed for bankruptcy in 1980. Allied Products Co. purchased the operation in late 1986. Starting in the 1920s, White Farm's operations generated foundry sand, sludges, and dust from air pollution control equipment. Since 1971, the plant intermittently has been disposing of foundry sands, baghouse dust, and other industrial wastes at the site. Approximately 650,000 cubic yards of these wastes were placed on site. Nearby residents have complained of dust blowing off the dump. Charles City draws its drinking water from an aquifer underlying the White Farm Equipment Co. Dump site. There are about 10,000 people living within 3 miles of the site who use drinking water from public and private wells within 3 miles of the site, and 2,300 people live within a 1-mile radius of the site. The contamination from the site flows into the Cedar River, which is used for recreational activities.

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

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 08/30/90

Threats and Contaminants



Heavy metals including arsenic, chromium, copper, lead, nickel, and zinc and volatile organic compounds (VOCs) from the former waste disposal practices are contaminating the groundwater. Sediments, soils, and surface water contain heavy metals. Health of individuals could be at risk if the contaminated groundwater, surface water, soil, or sediments are accidentally ingested or touched. The Cedar River wetlands may also be at risk from contaminants.

Cleanup Approach

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

Response Action Status

Entire Site: One of the parties potentially responsible for the contamination investigated the nature and extent of contamination. The investigation included characterization of waste in the landfill, determination of contamination spread by rainwater runoff, detection of contamination spread by air, detection of contamination spread by dissolved metal, and determination of groundwater movement and evaluation of possible connections between the shallow aquifer and the drinking water aquifer. The EPA chose a compacted soil and vegetative layer cap as the cleanup measure in 1990. The potentially responsible parties began cleanup actions in mid-1994. Cleanup is scheduled for completion in late 1994.

Site Facts: In 1989, the EPA and two parties potentially responsible for the contamination signed an Administrative Order on Consent. In that Order, one of the parties agreed to take responsibility for the site investigation to determine the nature and the extent of the contamination. In 1991, a Consent Decree was signed by the party to design and perform site cleanup. The Consent Decree required sampling of groundwater. The initial round of sampling indicated no contamination in the groundwater. A second round of sampling is underway to confirm the original results.

Environmental Progress

After adding the site to the NPL, the EPA determined that no immediate actions were required. Final cleanup actions are scheduled for completion in late 1994.

Site Repository

Charles City Public Library, 106 Milwaukee, Charles City, IA 50616