

On this day The U.S. Environmental Protection Agency (EPA) Determines that the

Harris Corporation (Palm Bay Facility) Superfund Site Is Ready for Commercial and Industrial Reuse

> Franklin E. Hill, Director Superfund Division U.S. EPA Region4

Date

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This Ready for Reuse Determination (RfR) is for the Harris Corporation (Palm Bay Facility) Site (Site). This RfR Determination states that EPA has made a technical determination that the Site, located in Palm Bay, Brevard County, Florida, is ready for commercial and industrial use and its remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and the limitations as specified in the Records of Decision (RODs), Explanation of Significant Differences (ESD), Five-Year Review (FYR), and Florida Administrative Code (FAC) Chapter 65-524. These requirements are summarized in the attached report, Ready for Reuse Determination, Harris Corporation (Palm Bay Facility) Superfund Site, October, 2009. This RfR Determination remains valid only as long as the requirements specified in the Site's RODs, ESDs, FYRs, and the FAC, Chapter 62-524, are met.

Institutional controls (ICs) are required by the ESD and future users of the Site should comply with local land use regulations and the implemented remedy. The Site falls within a Florida Ground Water Delineation Area, pursuant to FAC Chapter 62-524, which restricts most new, potable water well placements in the delineation area and acts as an IC at the Site. Based upon information available as of this date, EPA has determined that the unacceptable levels of risk to current and future users of the Site have been mitigated for commercial or industrial users.

This Ready for Reuse Determination is a technical decision document and an environmental status report and does not have any legally binding effect, nor does it expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities or for any possible or potential harm that might result from reuse activities. The EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the remedy and/or the conditions at the Site are no longer protective of human health or the environment for the uses identified in this Ready for Reuse Determination.

The types of uses identified in this RfR Determination remain subject to (i) applicable federal, state, and local regulation, including, but not limited to, zoning ordinances and building codes, and to (ii) title documents, including, but not limited to, easements, restrictions, and institutional controls.



Ready for Reuse Determination Harris Corp. (Palm Bay Plant) Superfund Site

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I. Executive Summary

This Ready for Reuse (RfR) Determination is for the Harris Corp. (Palm Bay Plant) Superfund Site ("Site"). The Site is approximately 310 acres, has two operable units (OUs), and is located in the City of Palm Bay, Brevard County, Florida. Harris Corporation has been manufacturing electronic parts, communication, or information processing equipment on the Site since 1967. Intersil Corporation acquired the semiconductor operations from the Harris Corporation in 1999. Portions of the Site remain in continued use; other portions are currently vacant or unused. The Harris and Intersil Corporations continue to manufacture equipment on Site. Two previous manufacturing firms operated on a portion of the property and used the Site for painting operations, a chromium plating operation, a machine shop, and drum storage area. In 1980, volatile organic compound (VOC) contamination was detected during sampling of public water supply wells south of the Site. Plumes of contaminated ground water were subsequently identified beneath the Site and the adjacent well field owned by Palm Bay Utilities. Operable Unit 1 addresses the ground water contamination associated with the property on which the buildings and operations of the Harris Corporation (Government Communications Systems Division) are located, south of Palm Bay Road. Operable Unit 2 addresses the ground water contamination associated with the Intersil Corporation property and is located north of Palm Bay Road.

This RfR Determination is based on limitations and requirements established in United States Environmental Protection Agency (EPA) decision documents for the Site, including the 1990 OU1 and 1995 OU2 Records of Decision (ROD), the 1992 OU1, 1995 OU2, and 2009 sitewide Explanations of Significant Differences (ESDs), and the 2009 Five-Year Review. EPA has made a technical determination that the entire Site is ready for commercial and industrial use, and that the Site's remedy will remain protective of human health and the environment, subject to operations and maintenance of the remedy and the limitations as specified in the RODs, ESDs, Five-Year Review, and Florida Administrative Code (FAC) Chapter 65-524 as summarized in the text of this RfR Determination.

EPA has assessed the risk to human health and the environment resulting from contamination at the Site. Unacceptable risks identified for the Site included human exposure to contaminants through ground water. EPA also concluded that soil, sediment, and surface water at both OUs did not contain contaminants at concentrations that would cause unacceptable risks to human health or the environment. With the completion of the response actions required by the decision documents, the Site has attained EPA cleanup goals and remedial action objectives for the majority of the Site. The entire Site is ready for industrial or commercial use.

The Site falls within a Florida Ground Water Delineated Area, pursuant to FAC, Chapter 62-524, which restricts most new, potable water well placements in the delineated area and acts as an institutional control (IC) at the Site. This restriction on new wells must be complied with in order for the Site to remain protective.

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Based upon information available as of this date, EPA has determined that the unacceptable levels of risk to current and future users of the Site have been mitigated for commercial or industrial users. The Site is ready for commercial or industrial use and the Site's remedy will remain protective of human health and the environment, subject to operations and maintenance of the remedy and limitations as specified in the ROD, ESDs, FYRs, and FAC Chapter 65-524.

EPA Region 4 issued this Ready for Reuse Determination, effective October, 2009.

Approved by ç Franklin E. Hill, Director

Superfund Division U.S. EPA Region4

Date:

Documents pertaining to the Site and the RfR Determination are part of the Administrative Record for the Site, which is available for review at the EPA Region 4 Waste Division's offices, located at 61 Forsyth Street, S.W., Atlanta, Georgia 30303. Additional information can be obtained from Michael Taylor, the Site's Remedial Project Manager (RPM) for EPA, who can be reached at 404-562-8762 or taylor.michael@epa.gov.

II. Site and Parcel Location

The Harris Corp. (Palm Bay Plant) Superfund Site ("Site") is located in eastern central Florida approximately three miles from the Atlantic Ocean (Figure 1). The Site is approximately 310 acres along 2400 Palm Bay Road, within the City of Palm Bay, Brevard County, Florida.





The Site is divided into two operable units (OUs). Operable Unit 1, the Harris Corporation Government Communications Systems Division (formerly Electronic Systems Sector), is located south of Palm Bay Road, and OU2, the Intersil Corporation property (formerly the Harris Semiconductor Complex), is located north of Palm Bay Road. The Harris Government Communications Systems Division and the Building 100 area (acquired in 1970) comprise OU1, which includes approximately 170 acres. The Brevard County Property Tax Parcel identification numbers for OU1 are 28-37-23-FN-00000.0-000F.00 and 28-37-23-FN-00005.0-0001.00, respectively. The Intersil Corporation property is OU2, which includes approximately 140 acres. The Brevard County Property Tax Parcel identification numbers for OU2 are 28-37-23-00-00250.0-0000.00 and 28-37-23-00-00256.0-0000.00. This Ready for Reuse (RfR) Determination is for both OU1 and OU2. Figure 2 shows the OU1 and OU2 parcel maps.



Figure 2: Site Parcel Map

Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose.

This map was created using maps from L.S. Sims & Associates Annual Reports.

III. Site Summary

Site and Contaminant History

The Harris Corp. (Palm Bay Plant) Superfund Site was listed on the United States Environmental Protection Agency (EPA)'s National Priorities List (NPL) in 1987. Radiation Corporation, an electronics firm supporting the aerospace industry, operated at the Site in the 1950s and 1960s. Harris Corporation purchased Radiation Corporation and has been operating in Palm Bay since 1967. Two previous manufacturing firms (Sorban and Mohawk Data Services) operated at the former Building 100 area and used this portion of the Site for painting operations, a chromium plating operation, a machine shop, and drum storage area.

Harris Corporation has identified the areas where historical release events occurred that contributed to the Site's contamination. Releases included two fires in Building 6 in 1967 and 1974. During the fires, chemical vats were dumped by responding emergency personnel and drum contents were flushed out through holes punched in the building floor.

Source areas included a drum storage area, a ditch, and an acid line leak. The drum storage area was used in the late 1960s for paints, solvents, and similar materials. During this time, an acid/solvent line located between Building 6 and the metal-finishing waste treatment plant leaked and caused drum storage contaminants to migrate into a stormwater drain extending from this area to two neutralization lagoons and then into a drainage ditch along Perimeter Road. In addition, a ditch located south of the lagoons conveyed water to two treatment lagoons. More recently, Harris Corporation documented a 1986 acid line leak in the area of Building 4. Although there was also a drum storage area and metal plating/machine shop adjacent to Building 100, no direct releases in this area have been reported.

Ground water beneath the Site has been contaminated due to releases of volatile organic compounds (VOCs). In addition, VOCs have been detected in wells on the Palm Bay Utilities property located adjacent to the southern boundary of the Harris Corporation (Palm Bay Facility). Palm Bay Utilities provides potable water supply as well as sewage treatment and disposal for residents of Palm Bay. The Site was proposed for listing on the NPL in April 1985, and placed on the NPL in July 1987.

Description of Risks

Based on the risk assessments conducted, EPA determined that the ground water contamination at OU1 and OU2 had the potential to cause adverse health effects and/or an unacceptable increased risk of cancer. Contaminants of concern (COCs), including vinyl chloride, trichloroethylene, and chromium, at both OUs were selected based on samples collected from monitoring wells and Palm Bay Utilities water supply wells. The 1990 Record of Decision (ROD) also specified 13 organic compounds and five inorganic

compounds as COCs and required that the Harris Corporation evaluate the effectiveness of the existing pump and treat remedy during a 1993 Remedial Design Review. EPA also concluded that soil, sediment, and surface water at both OUs did not contain contaminants at the concentrations that would pose unacceptable risks to human health or the environment.

EPA decided to address the Site as two operable units. Operable Unit 1 includes ground water at the Harris Corporation Government Communications Systems Division (formerly Electronic Systems Sector) facility on the south side of Palm Bay Road, including the former Building 100 area. Operable Unit 2 includes ground water at the former Harris Corporation Semiconductor Sector facility north of Palm Bay Road. The Intersil Corporation acquired the semiconductor operations from the Harris Corporation in 1999 and currently occupies the OU2 area. Each OU was addressed using separate ground water recovery and treatment systems.

Summary of Cleanup Activities

Table 1 summarizes relevant events and important dates in the Site's history.

Date	Event
September 1980	Discovery
December 1097	Harris Corporation/ Florida Department of Environmental Protection (FDEP)
December 1983	Consent Order
July 22, 1987	NPL listing
June 28, 1990	Remedial Investigation/Feasibility Study (RI/FS) for OU1 complete
June 28, 1990	ROD signature for OU1
June 28, 1990	Potentially Responsible Party (PRP) Remedial Action (RA) start for OU1
October 25, 1991	Consent Decree for OU1
October 25, 1991	Remedial Design (RD) start for OU1
January 23, 1992	Administrative Order on Consent (AOC) for OU1
January 23, 1992	RI/FS for OU2 complete
December 1, 1992	Explanation of Significant Differences (ESD) for OU1
February 15, 1995	ROD signature for OU2
December 8, 1995	ESD for OU2
1005-1006	Correspondence between EPA and Harris Corporation regarding removal of
	OUI COCs
May 30, 1996	RD for OU1 complete
July 12, 1996	PRP RA Completion Date for OU1
November 20, 1996	RD start for OU2
January 27, 1997	Consent Decree for OU2
May 21, 1997	RD for OU2 complete
May 21, 1997	PRP RA Start Date for OU2
July 1, 1998	PRP RA Completion Date for OU2
July 1, 1998	Construction Completion Date
June 13, 2000	OU2 pump and treat system placed on standby
October 21, 2002	OU1 pump and treat system placed on standby
February 3, 2004	First Five-Year Review signed
March 2004	2003 Annual System Performance Review submitted to EPA and FDEP
February 2005	2004 Annual System Performance Review submitted to EPA and FDEP
February 2006	2005 Annual System Performance Review submitted to EPA and FDEP
February 2007	2006 Annual System Performance Review submitted to EPA and FDEP
February 2008	2007 Annual System Performance Review submitted to EPA and FDEP
February 3, 2009	Second Five-Year Review signed
February 19, 2009	ESD for Site

Table 1: Chronology of Site Events

Remedial Activities at OU1

Remedial activities at OU1 address the ground water contamination associated with the Government Systems Facility of Harris Corporation property. Initial cleanup actions were undertaken by Harris Corporation with oversight provided by the State of Florida. In 1984, an airstripping tower was installed at the Palm Bay Utilities Plant to remove VOCs from the impacted public supply wells. A ground water extraction and treatment system was then installed by Harris Corporation to treat contaminated ground water

associated with OU1. The selected remedy for OU1 in the Site's June 1990 ROD required modifications to the existing ground water extraction and treatment system and consisted of the following remedial components:

- continued operation of the existing extraction, treatment, and disposal system;
- a design analysis for plume containment and treatment;
- modification of the extraction, treatment, and disposal system based on results of the design analysis;
- continued sampling and monitoring of the cleanup; and
- a review of the system by EPA and Florida Department of Environmental Regulation (FDER) within five years after the onset of the RA.

An ESD was issued by EPA in December 1992, adding COCs and updating cleanup goals for other COCs. Through additional 1995 and 1996 correspondence with the Harris Corporation, EPA removed several compounds as OU1 COCs. Monitoring and remediation requirements for these contaminants were removed based on information provided in the 1993 Remedial Design Review Report for OU1 and the 1995 Annual System Performance Review.

Based on evaluations of the natural attenuation processes occurring at the Site, decreased contaminant concentrations in monitoring well samples, and the relatively small amount of mass being removed from the ground water at OU1, EPA approved the temporary deactivation of the OU1 ground water treatment system on April 2, 2002. In October 2002, the OU1 system was placed on standby mode with continued monitored natural attenuation (MNA) of the ground water.

Remedial Activities at OU2

Operable Unit 2 addresses the ground water contamination at the Intersil Corporation property. The major components of the selected remedy for OU2 in the Site's February 1995 ROD included:

- continued operation of the existing extraction, treatment, and disposal system;
- extraction of contaminated ground water from the surficial aquifer;
- treatment of the extracted ground water by air stripping;
- injection of the treated ground water into the Floridan Aquifer;
- elimination of Recovery Well SC-TS4; and
- ground water monitoring.

As specified in the ROD, the preferred remedial alternative was the continued operation of the pump and treat remedy. The ROD also specified the construction of a new monitoring well and the decommissioning of one of the active recovery wells. Six organic compounds (PCE, trichloroethene (TCE), cis-1,2-dichloroethene, vinyl chloride (VC), benzene, and bis-(2-ethylhexyl) phthalate) and one inorganic contaminant (manganese) were identified as COCs. After further consideration and review of site data, EPA issued an ESD in December 1995. The ESD removed two of the organic compounds (benzene and bis-(2-ethylhexyl) phthalate) as COCs at the Site. The ESD also removed manganese as a contaminant requiring ground water treatment and limited manganese monitoring to one well (SC-2S).

Based on decreased contaminant concentrations in monitoring well samples and the relatively small amount of mass being removed from the ground water at OU2, EPA approved the deactivation of the OU2 ground water treatment system on June 5, 2000. On June 13, 2000, the OU2 system was placed on standby mode with continued MNA of the ground water.

Institutional controls were needed to restrict the use of contaminated ground water. The Site is located within a Florida Ground Water Delineated Area, pursuant to FAC, Chapter 62-524, which restricts most new, potable water well placements in the delineated area and acts as an IC at the Site. An ESD was signed for the Site in February 2009, to require this IC until cleanup goals are met.

Redevelopment/Reuse History

The Site is currently ready for commercial or industrial reuse. Portions of the Site remain in continued use; others remain vacant. The Harris and Intersil Corporations have continued to manufacture equipment on Site. As of August 3, 2009, the Site meets the requirements to be considered Sitewide Ready for Anticipated Use, which is an EPA performance measure under the Government Performance and Results Act.

IV. EPA's Basis for the Ready for Reuse (RfR) Determination

EPA has based the Harris Corp. (Palm Bay Plant) Superfund Site RfR Determination on documents produced during the course of remedial activities at the Site. These documents provide evidence that the Site is ready for commercial or industrial use and that the Site's remedy will remain protective of human health and the environment, subject to operations and maintenance of the remedy and limitations as specified in the RODs, ESDs, Five-Year Review, and the FAC, Chapter 62-524.

The RfR Determination is based primarily on the Site's 2009 Five-Year Review, which stated that the remedy at the Site currently protects human health and the environment because contaminated ground water is not being used for potable purposes, as well as the 2009 ESD, which documented a final decision to include ICs in the form of a Florida Ground Water Delineated Area as part of the ground water remedy for the Site. In addition, the 2009 Sitewide Ready for Anticipated Use approval package provides additional evidence that the Site is Ready for Reuse.

V. Ongoing Limitations and Responsibilities Previously Established by EPA

Institutional and Engineering Controls

The February 2009 ESD documented EPA's decision to select the Site's location in a Florida Ground Water Delineated Area as an IC that is part of the ground water remedy for the Site. The remedial action provided in the Site's 1990 and 1995 RODs did not include ICs for ground water. The Florida Ground Water Delineated Area, pursuant to the FAC, Chapter 62-524, restricts most new, potable water well placements in the delineation area unless a demonstration is made of excessive technical difficulty or cost.¹

Figure 3: Institutional Controls at the Site



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose.

Operations and Maintenance Requirements

Operations and maintenance (O&M) activities at the Site include ground water monitoring. Operable Unit 1 and OU2 ground water sampling was conducted quarterly,

¹ Information about the Florida Department of Environment Protection's Delineation Program can be found online at: <u>http://www.dep.state.fl.us/water/groundwater/delineate.htm</u> and FAC Chapter 62-524 can be found online at: <u>http://www.dep.state.fl.us/legal/Rules/groundwater/62-524/62-524.pdf</u>.

semi-annually, and annually in 2003 and 2004. Ground water sampling was conducted quarterly and annually in 2005, 2006, and 2007. Ground water sampling was annual in 2008. System Performance Review Reports are submitted to EPA and FDEP annually.

VI. Provisos

This RfR Determination is an environmental status report and does not have any legally binding effect and does not expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities and/or for any potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including, but not limited to, legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including, but not limited to, instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the response and/or the conditions at the Site are no longer protective of human health or the environment for the types of uses identified in the RfR Determination.

The types of uses as identified as protective in this RfR Determination remain subject to: (i) applicable federal, state, and local regulation; and to (ii) title documents, including, but not limited to, easements, restrictions, and ICs.

This RfR Determination remains valid only as long as the requirements specified in the Site's RODs, ESDs, Five-Year Review, and the FAC, Chapter 62-524, are met.

APPENDIX A

List of Acronyms

AOC	Administrative Order on Consent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of Concern
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDER	Florida Department of Environmental Regulation
HRS	Hazard Ranking System
ICs	institutional controls
MNA	monitored natural attenuation
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operations and Maintenance
OSRTI	Office of Superfund Remediation and Technology Innovation
OSWER	Office of Solid Waste and Emergency Response
OU	Operable Unit
PA	Preliminary Assessment
PCE	Tetrachloroethene
PRP	Potentially Responsible Party
RA	Remedial Action
RD	Remedial Design
RfR	Ready for Reuse Determination
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SI	Site Inspection
TCE	Trichloroethene
µg/L	micrograms per liter
VC	vinyl chloride
VOCs	Volatile Organic Compounds

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APPENDIX B

Glossary

Administrative Order

A legal agreement signed by EPA and an individual, business, or other entity through which the entity agrees to take an action, refrain from an activity, or pay certain costs. It describes the actions to be taken, applies to civil actions, and can be enforced in court. In limited instances it may be subject to a public comment period.

Baseline Risk Assessment

A qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants. A risk assessment characterizes the current or potential threat to public health and the environment that may be posed by chemicals originating at or migrating from a contaminated site.

Cleanup

Actions taken to deal with a release or threatened release of hazardous substances that could affect public health or the environment. Cleanup is often used broadly to describe various response actions or phases of remedial activities, such as a remedial investigation/feasibility study. The term "cleanup" is sometimes used interchangeably with the terms "remedial action," "remediation," "removal action," "response action," or "corrective action."

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Commonly known as Superfund, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by Congress in December 1980. CERCLA is intended to protect human health and the environment by enabling the investigation and cleanup of abandoned or uncontrolled hazardous waste sites. Under the program, EPA either can pay for a site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work, or take legal action to force parties responsible for site contamination to clean up the site or repay the federal government for the cleanup cost.

Construction Completion

Sites qualify for Construction Completion status when: any necessary physical construction is complete; EPA has determined that a response action should be limited to measures that do not involve construction; or sites qualify for deletion from the NPL.

Consent Decree

A legal document, approved by a judge, that formalizes an agreement reached between EPA and potentially responsible parties through which the parties will conduct all or part of a cleanup action at a Superfund site; cease or correct actions or processes that are polluting the environment; or otherwise comply with EPA-initiated regulatory enforcement actions. The consent decree describes the response actions that PRPs will take and may be subject to a public comment period.

Contaminant

Any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.

Contamination

Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use.

Engineering Controls

Engineering controls eliminate or reduce exposure to a chemical or physical hazard through the use or substitution of engineered machinery or equipment. An example of an engineering control is a protective cover over waste left on site.

Environment

The sum of all external conditions affecting the life, development, and survival of an organism.

Environmental Protection Agency (EPA)

Federal agency whose mission is to protect human health and safeguard the environment.

Environmental / Ecological Risk

The potential for adverse effects on living organisms associated with pollution of the environment by effluents, emissions, wastes, or accidental chemical releases; by energy use; or by the depletion of natural resources.

Explanation of Significant Differences (ESD)

A significant change to a Record of Decision for a Superfund site that does not fundamentally alter the site's remedy. An ESD is initiated by EPA.

Exposure Pathways

Exposure pathways are means by which contaminants can reach populations of people, plants, or animals. Exposure pathways include ground water, surface water, soil, and air.

Feasibility Study

A study, which follows a remedial investigation, that EPA conducts to screen and evaluate alternatives to clean up a site based on nine evaluative criteria, including effectiveness, cost, and community acceptance.

Florida Department of Environmental Protection (FDEP)

State agency whose mission is to protect, conserve, and restore Florida's natural resources with the primary goal of protecting human health.

Ground Water

Water found beneath the earth's surface that fills pores between materials, such as sand, soil, limestone, or gravel. In aquifers, ground water occurs in sufficient quantities that it can be used for drinking water, irrigation, and other purposes.

Hazardous Substance

1. Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive. 2. Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

Hazardous Waste

By-products that can pose a substantial or potential hazard to human health or the environment when improperly managed. Hazardous waste possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity) or appears on special EPA lists.

Information Repository

A file containing current information, technical reports, and reference documents regarding a Superfund site. The Information Repository is usually located in a public building, such as a public school, city hall, or library, which is conveniently located for community residents. As the site proceeds through the Superfund remedial process, the file at the Information Repository may be updated.

Institutional Controls (ICs)

Non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land or resource use.

Lead Agency

An agency such as EPA or other federal agencies and state agencies that plan and implement response actions under the NCP (e.g., the agency that has the primary responsibility for coordinating a CERCLA response action).

Monitoring

Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media or in humans, plants, and animals.

National Contingency Plan (NCP)

The federal regulations that guide the Superfund program. The National Oil and Hazardous Substances Pollution Contingency Plan, more commonly known as the National Contingency Plan, or NCP, is the federal government's blueprint for responding to both oil spills and hazardous substance releases.

National Priorities List (NPL)

The NPL is EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System (HRS). EPA is required to update the NPL at least once a year.

Natural Attenuation

The natural process (i.e., unaided by human intervention) by which a contaminant is reduced in concentration over time through absorption, adsorption, degradation, dilution, and/or transformation.

Natural Resources

Land, fish, wildlife, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, or controlled by the United States, a state or local government, any foreign government, any Indian tribe, or any member of an Indian tribe.

Operable Unit (OU)

Term for each of a number of separate activities undertaken as part of a Superfund site cleanup. A typical operable unit would be the removal of drums and tanks from the surface of a site.

Operations and Maintenance (O&M)

Activities conducted after a Superfund remedial action is completed to ensure that a site remedy remains protective in the future.

Office of Superfund Remediation and Technology Innovation (OSRTI)

EPA office that manages the Superfund program, which was created to protect citizens from the dangers posed by abandoned or uncontrolled hazardous waste sites. Congress established Superfund through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Office of Solid Waste and Emergency Response (OSWER)

EPA office that develops guidelines and standards for the land disposal of hazardous wastes and underground storage tanks. OSWER also implements a program to respond to abandoned and active hazardous waste sites and accidental releases, including some oil spills, and encourages the use of innovative technologies for contaminated soil and ground water.

Pollutant

Generally, any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

Potentially Responsible Party (PRP)

An individual, company, or other entity (such as owners, operators, transporters, or generators of hazardous waste) potentially responsible for, or contributing to, contamination at a Superfund site. Whenever possible, EPA requires a PRP, through administrative and legal actions, to clean up hazardous waste sites that it has contaminated.

Preliminary Assessment (PA)

Investigations of site conditions to ascertain the source, nature, extent, and magnitude of contamination.

Record of Decision (ROD)

This EPA document presents the final remediation plan for a site. It documents all activities prior to selection of the remedy, and provides a conceptual plan for activities subsequent to the ROD. The purpose of the ROD is to document the remedy selected, provide a rationale for the selected remedy, and establish performance standards or goals for the site or operable unit under consideration. The ROD provides a plan for site remediation, and documents the extent of human health or environmental risks posed by the site or operable unit. It also serves as legal certification that the remedy was selected in accordance with CERCLA and NCP requirements.

Remedial Design / Remedial Action (RD/RA)

Remedial Design (RD) is the phase in Superfund site remediation where the technical specifications for remedies and technologies are determined. Remedial Action (RA) follows the remedial design phase and involves the actual construction or implementation phase of Superfund site remediation. The RD/RA is based on the specifications described in a site's Record of Decision (ROD).

Remedial Investigation (RI)

The first of the two-part site study known as a remedial investigation/feasibility study. The remedial investigation involves collecting and analyzing information about a site to determine the nature and extent of contamination that may be present. The risk assessment, conducted with the remedial investigation, determines how conditions at a site may affect human health or the environment.

Remediation

The removal of pollution or contaminants from land, water, and air to protect human health and the environment. Also see Cleanup.

Responsiveness Summary

A summary of oral and written comments received by EPA during a public comment period on key site-related documents, with EPA's responses to those comments. The responsiveness summary highlights community concerns to be taken into account by EPA in making decisions on a site and is a key part of the ROD.

Restrictive Covenants

Deed restrictions that apply to a specific real estate parcel. A type of proprietary control, which is a type of legal instrument that has its basis in real property law and is unique in that it generally creates legal property interests placed in the chain of title of a site property. A restrictive covenant is a promise by the holder of a possessory interest in property to refrain from using the property in a certain manner.

Risk Assessment

An evaluation of the likelihood of exposure and potential magnitude of future health or environmental effects that could occur if no cleanup action is taken on a site. Risk assessment may include both qualitative (non-numerical) evaluation and quantitative (numerical) calculations based on specific assumptions about long-term exposure risks. Ecological risk assessment applies to animals, fish, vegetation, and other environmental receptors. Human health risk assessment estimates the potential effects on people. Risk assessment results are used to identify site cleanup requirements.

Site Inspection (SI)

The process of collecting site data and samples to characterize the severity of the hazard at a contaminated site.

Superfund

The program operated under the legislative authority of CERCLA that funds and carries out EPA solid waste emergency and long-term removal and remedial activities. These activities include establishing the NPL, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. Superfund is the common name for CERCLA and is often used as an adjective for hazardous waste sites and the investigation and cleanup process directed by EPA.