COMMUNITY INVOLVEMENT PLAN

WARD TRANSFORMER SUPERFUND SITE, OPERABLE UNIT 1
RALEIGH, WAKE COUNTY, NORTH CAROLINA

AUGUST 2020

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4

Approved by: Angela Miller **Date:** 08/13/2020

THE U. S. ENVIRONMENTAL PROTECTION AGENCY'S (EPA)
SUPERFUND COMMUNITY INVOLVEMENT PROGRAM IS COMMITTED
TO PROMOTING COMMUNICATION BETWEEN CITIZENS AND THE AGENCY.

ACTIVE PUBLIC INVOLVEMENT IS CRUCIAL TO THE SUCCESS OF ANY PUBLIC PROJECT.

EPA'S COMMUNITY INVOLVEMENT ACTIVITIES AT THE
WARD TRANSFORMER SUPERFUND SITE, OPERABLE UNIT 1
ARE DESIGNED TO

INFORM THE PUBLIC OF THE NATURE OF THE ENVIRONMENTAL ISSUES ASSOCIATED WITH THE SITE,

INVOLVE THE PUBLIC IN THE DECISION-MAKING PROCESS THAT WILL AFFECT THEM,

INVOLVE THE PUBLIC IN THE RESPONSES UNDER CONSIDERATION TO REMEDY THESE ISSUES,

INFORM THE PUBLIC OF THE PROGRESS BEING MADE TO IMPLEMENT THE REMEDY, AND

AFFORD THE COMMUNITY OPPORTUNITIES TO LEARN ABOUT THE SITE.

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Section 1.0 Overview of the Community Involvement Plan

The United States Environmental Protection Agency (EPA) developed this Community Involvement Plan (CIP) to inform and involve the community in a two-way discussion about the Ward Transformer Superfund Site (the Site), **Operable Unit*** (OU) 1. This CIP is developed in accordance with the EPA's **Superfund** Program. It provides information about community concerns and presents a plan that is intended to enhance communication between local residents and the EPA as the investigation and **cleanup** at the Site progresses.

The objective of the EPA's Superfund Community Involvement Program is to involve the public in activities and decisions related to the cleanup of Superfund sites. The EPA recognizes the importance of actively soliciting comments and information from the community in its decision-making process. Public input can be useful in two ways:

- Communities are able to provide valuable information on local history, citizen involvement, and site conditions.
- Communities that express concerns assist the EPA in recognizing the unique characteristics of each site community and in developing a response that more effectively addresses specific community needs.

This CIP consists of the following sections:

- A description and brief history of the Ward Transformer Superfund Site.
- A profile of Raleigh and Wake County.
- A discussion of community involvement objectives for the Site and activities designed to implement them.

This CIP contains the following appendices:

- A list of contacts and interested groups.
- A list of locations for public meetings and the site **information repository**.
- A list of acronyms, technical terms, and references.

The EPA Region 4 has the lead responsibility for managing the investigation, selecting the cleanup alternative, and providing technical and community involvement work at the Site.

*Words appearing in **boldface** type are defined in Appendix J, Glossary.

Section 2.0 Capsule Site Description

2.1 Site History

The Site was owned by Ward Transformer Company, Inc. and operated by Ward Transformer Sales and Service, Inc. (collectively "Ward") until 2006. The facility was built in 1964 on approximately 11 acres of previously undeveloped land. As part of its operations, Ward built, repaired, sold, and reconditioned transformers, switchgear, and other similar types of electrical equipment at the Site. As a result of Ward's operations, **polychlorinated biphenyls** (PCBs) were released into the environment.

The facility included the main building, where transformers were handled and offices were located, the transformer storage yard, a stormwater management lagoon, and a building housing a Stormwater Treatment Plant (SWTP) system. On the northern portion of the Site, a warehouse that was formerly part of the Ward operations was leased to Horizon Forest Products, a lumber supply business, circa 1976 to 2002. It is now vacant.

Prior to 1972, all runoff from the facility flowed overland or was carried in drainage ditches to intermittent streams located west and southwest of the facility. One of the streams receiving runoff from the facility included an unnamed tributary to Little Brier Creek (Reach A), located west of the on-site lagoons. Some of the facility's runoff also entered a drainage ditch located along the northern side of the property, adjacent to the transformer storage yard, and some also may have flowed northwesterly overland into an intermittent stream, which also flowed to the west.

In 1971, two lagoons were created on the southern portion of the Ward property for retention of stormwater runoff. The upper lagoon had a pipe that drained to the lower lagoon. The lower lagoon then had a pipe that drained to the unnamed tributary to Reach A.

Around 1979, a concrete curb was built around the perimeter of the facility pad for the purpose of directing all stormwater runoff into the on-site lagoons. At approximately the same time, the SWTP system was installed in a building located north of the lagoons. Runoff collected in the pond was pumped to the SWTP for treatment prior to discharge via a **National Pollutant Discharge Elimination System** (NPDES) permitted outfall located at the beginning of Reach A. No detectable concentrations of PCBs were allowed in the treated effluent. Effluent was also monitored for total chloride, total iron, total fluoride, total phosphorus, total nitrogen, and oil and grease.

The Site was proposed for inclusion on the **National Priorities List** (NPL) of Hazardous Waste Sites on September 5, 2002 and finalized on the NPL on April 30, 2003, due to contaminated fish tissue, sediment, and soil caused by facility operations. NPL listing authorizes the EPA to conduct environmental cleanup in well-defined steps that are mandated within the **Comprehensive Environmental Response, Compensation, and Liability Act** (CERCLA), also known as Superfund. The Superfund program has the authority to force potentially responsible parties to perform the cleanup or reimburse the government for the EPA-led cleanup work.

Between September 2002 and September 2008, EPA completed the **Remedial Investigation/Feasibility Study** (RI/FS) and Baseline Human Health **Risk Assessment** (BHHRA) Report for the Site. Completion of a RI/FS is the first step in the Superfund process that identifies the nature and extent of contamination and identifies potential strategies or **remedial actions** that clean up contamination.

Based on the BHHRA, the **contaminants of concern** (COCs) for the Site are PCBs and **PCB congeners**. Although some of the calculated human health risks were associated with exposure to **dioxins and furans**, over 90% of the risks were associated with PCBs (**Aroclor** 1260 or PCB congeners). As such, PCBs and PCB congeners are the site-related chemicals driving the need for a remedial action at the Site.

Superfund recognizes the value of soliciting the community's insight into selecting a preferred remedial action. Therefore, the EPA summarized proposed remedial actions and associated costs into a **Proposed Plan** and invited the community's participation in selecting a preferred remedial action. Following consideration of all public comments, the EPA documented the preferred remedial alternative in a legal document called a **Record of Decision** (ROD), issued for the Site in September 2008. The ROD contains a **Responsiveness Summary** that responds to all comments collected during the 30-day **public comment period**. Production of the RI/FS, Proposed Plan, and ROD are all sequential steps in the Superfund process.

2.2 Site Description/Location

The Site is located in the Crabtree Creek drainage basin along Mount Herman Road, in a predominantly industrial area of northwestern Raleigh, Wake County, North Carolina. It is situated 600 feet (ft) south-southeast of the Northern Wake Expressway/lnterstate-540 (1-540), 1,000 ft southwest of US Highway 70, and is adjacent to property owned by the Raleigh-Durham International (RDU) Airport. An aerial view of the Site and surrounding area is presented in Figure 1.

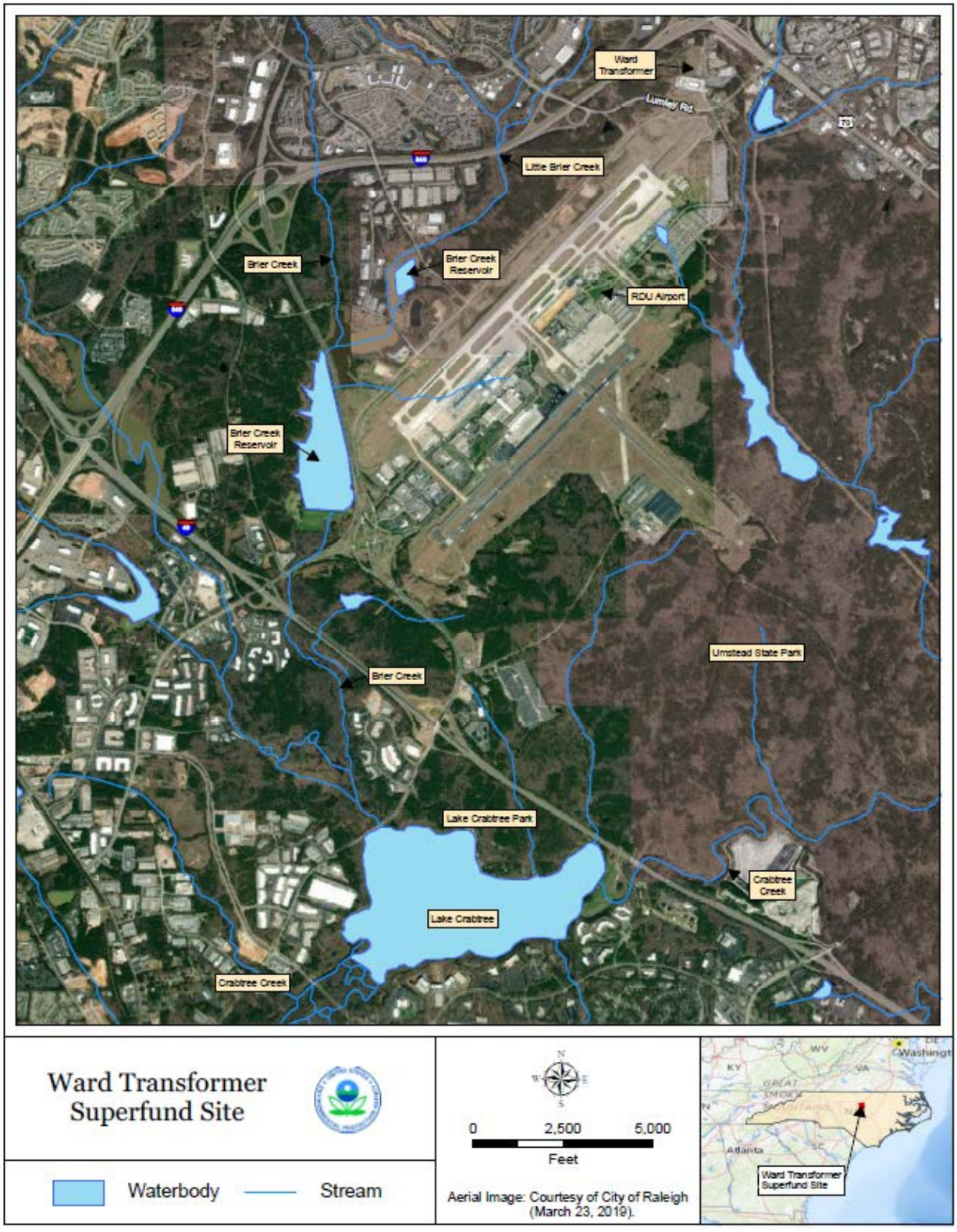
RDU proper (i.e., terminals) is located approximately two miles south of the Site, with airport runways located less than one mile to the south. Estes Express Lines, a trucking company, leases the property to the south from B&B Apartments. Across Mount Herman Road to the east of the Site is Triangle Coatings where plastic and metal parts are painted. In addition, Asteelflash Raleigh, an electronics manufacturer, is across Mount Herman Road to the east of the Site. In the summer of 2019, RDU Airport Authority acquired several parcels that are part of the Site in anticipation of future airport expansion.

Groundwater at the Site occurs in fractured bedrock at approximately five to seven ft below ground surface (bgs) in some areas. The groundwater beneath the Site flows predominantly to the west with some localized flow to the northwest and southwest following the site topography. Groundwater in the area generally discharges to local streams, so the Site groundwater most likely moves westward and discharges into the unnamed tributary to Little Brier Creek.

The nearest groundwater public water system (PWS) consists of five groundwater wells, located approximately 0.5 miles east of the facility in the Sycamore Creek watershed. No additional groundwater PWSs are located within a 1.0-mile radius of the Site. The nearest community water system utilizing a groundwater source is the Country Ridge subdivision, located approximately 2.8 miles east-southeast of the Site. The nearest transient, non-community groundwater drinking water system is the Bass Brothers/Triangle Golf Center, located approximately 1.5 miles northeast of the Site. No private drinking water supply wells are located within 1.0-miIe downgradient (west-southwest) of the facility.

No surface water drinking water supplies are located along the creeks or the Neuse River in the downstream study area. The nearest public drinking water supply surface water intake is located on the Neuse River, approximately 50 miles downstream of the facility, and operated by the Johnston County Water System. According to Johnston County Water System officials, PCBs have not been detected in any drinking water samples collected at the water treatment plant since they began operating in 1996.

Figure 1. Ward Transformer Superfund Site



2.3 Site Inspections and Cleanup Activities

EPA conducted a phased RI from April 2003 to April 2007. As part of the investigation, soil, sediment, surface water, groundwater, and fish samples were collected. The investigation covered the facility property and surrounding properties, together with more than 30 miles of waterways, including unnamed tributaries to Little Brier Creek (Reaches A, B, C, and D), Brier Creek Reservoir, Brier Creek, Lake Crabtree and some tributaries, Crabtree Creek and some tributaries, and a 0.5-mile segment of the Neuse River.

It is noted that the site was addressed as two OUs. OU1 addresses soil, sediment, surface water, and fish in areas downgradient from the Site, including Reaches B, C, and D, Brier Creek Reservoir, Lake Crabtree, and Lower Crabtree Creek. OU2 will be addressed with a future ROD for the final **remedy** of all media at the Site, certain parcels of land adjacent to the Site, and nearby drainage pathways upgradient of Reach B. Additional groundwater work will also be conducted as part of the OU2 ROD.

Between October 20, 2004 and November 8, 2004, the EPA sent Notice/Demand letters and draft **Administrative Orders of Consent** (AOCs) to 43 **Potentially Responsible Parties** (PRPs) (39 top-volume generator PRPs and four owner/operator PRPs) notifying them of their potential liability and providing them 60 days in which to enter into an agreement to conduct or finance a time-critical removal action (TCRA) at the Site, and to reimburse the EPA for its costs incurred to date. On December 22, 2004, the negotiation period officially ended. The EPA was unable to reach a settlement agreement with the PRPs for the performance of a TCRA and the reimbursement of the EPA's costs.

In November 2004, because fish samples collected from Lake Crabtree contained concentrations of PCBs that prompted fish consumption advisories by the State of North Carolina, additional sediment samples were collected from Lake Crabtree in order to further refine the estimated extent and magnitude of site-related contaminants.

On September 16, 2005, EPA entered into a Department of Justice-approved AOC with nine PRPs for the performance of a TCRA at the Site and what is now OU2.

In December 2005, additional surface water samples were collected from the unnamed tributary to Little Brier Creek between the stormwater lagoon outfall and Northern Wake Expressway/I-540 (Reach A) to confirm previous surface water sampling results and further characterize potential human health and ecological risk associated with site-related contaminants. Downstream sampling results indicated PCB contamination, specifically Aroclor 1260, at several locations in Reach A, immediately downstream of the Site, at concentrations exceeding the North Carolina Department of Environmental and Natural Resources (NC DENR) Surface Water Quality Standards for human health and aquatic life. No PCB Aroclors were detected in Reach B or any other locations further downstream, including Lake Crabtree.

In February and March 2006, in response to concerns expressed by the local community and stakeholders, additional sediment samples were collected at previously sampled locations

downstream from the Site, as well as from new locations further downstream. Maximum detected PCB concentrations are provided below:

Location	Maximum PCB Concentration (mg/kg)
Reach A (Floodplain Soil)	380
Reach A (Sediment)	62
Reach B, C, D, Brier Creek & Reservoir (Sediment)	4.2
Brier Creek Reservoir Fish	2.60
Lake Crabtree Fish	1.70
Crabtree Creek Fish	0.34

mg/kg = milligrams per kilogram

In June 2006, the PRPs' contractor mobilized to the Site and began implementation of the TCRA. The removal action included excavation of 420,000 tons of PCB-contaminated soil/sediment from the Site and some immediate surrounding areas, including Reach A, followed by treatment and off-site disposal, as appropriate. The PRPs also completed ecological restoration activities in the western part of the Site where the uppermost reaches of Little Brier Creek leave the Site.

In June 2007, the contractor for the PRPs again mobilized to the Site to initiate a removal action to address the main source of PCB contamination. The removal action included excavation and removal of contaminated soil and sediment from the Site and immediate surrounding areas, including Reach A. An estimated 150,000 tons of contaminated material were addressed either by on-site **Low Temperature Thermal Desorption** (LTTD) treatment or off-site disposal, as appropriate. Analytical data collected as part of the removal action activities showed that some of these areas contained the highest concentrations of PCBs detected in soil (13,000 mg/kg).

The EPA issued the ROD for OU1 in September 2008. The remedial action objectives for OU1 include the following:

- Minimize potential downstream migration of PCB-contaminated soil and sediment.
- Reduce PCB levels in fish tissues to levels that allow for unlimited consumption.

The selected remedy includes the following components:

- Continue or enhance existing North Carolina fish consumption advisories and signs.
- Implement education and community outreach programs.
- Conduct pre-excavation sampling of sediment and floodplain soil.
- Conduct a pre-excavation endangered mussel evaluation study.
- Excavate sediment/soil from Reaches B, C and D and lower Brier Creek, and transport sediment/soil off-site for appropriate disposal.
- Restore the Site and streams to pre-remediation conditions.
- Implement **Monitored Natural Recovery** (MNR) in Brier Creek Reservoir, Lake Crabtree and Lower Crabtree Creek.
- Conduct periodic monitoring of sediment and aquatic biota.

- Implement **Institutional Controls** (ICs).
- Conduct Five-Year Reviews (FYRs).

The ROD can be found in the local information repository in the North Regional Public Library and in the EPA Regional information repository (see Appendix I for addresses).

During the development of cleanup goals for OU1, two distinct areas were addressed separately because of their use scenarios and physical nature. The first area consists of Reaches B, C and D and lower Brier Creek (sediment and soil). These are streams with dimensions varying from eight to 30 ft in width and from three to 6.5 ft in bank height. The small size and depth of the streams (Reaches B, C and D) located upstream of the impoundment by the Brier Creek Reservoir Dam limit their use as a recreational fishery. The second area consists of lower Crabtree Creek and the surface water impoundments within OU1 (located downstream of Reach D), Brier Creek Reservoir, and Lake Crabtree. These areas support fishing activities.

The cleanup levels specified in the 2008 OU1 ROD are as follows:

Sediment and Soil

Contaminants of Concern	Concentration (mg/kg)
PCBs	1.0

mg/kg = milligrams per kilogram

Fish

Contaminants of Concern	Concentration (mg/kg)
PCBs	0.05

mg/kg = milligrams per kilogram

Status of Implementation

The PRPs began the **remedial design** process in September 2011 under a Unilateral Administrative Order (UAO). The PRPs entered into a Consent Decree with the EPA on November 22, 2016, requiring the PRPs to complete the remedial design and implement the selected remedy. Cleanup has been somewhat slower than originally forecasted due to protracted negotiations with the various PRPs performing the cleanup, but work is now moving forward at a faster pace. Cleanup at the Site is expected to be ongoing for several more years.

The estimated time required to achieve the remediation goal in fish tissue (0.05 mg/kg) at the Brier Creek Reservoir would be approximately 14 years, and in Lake Crabtree, approximately nine years. Fish consumption advisories issued by the State of North Carolina will remain in effect until contaminant concentrations in fish are below remediation goals.

In August 2019, the EPA approved the Pre-Final (90%) Cleanup Plan for OU1 – Little Brier Creek Reaches B, C, and D. The remedial action is estimated to be complete between June and August 2021.

The OU2 ROD for groundwater and soil is forecasted to be completed between September and November 2020, with the remedial design completed between April and June 2022.

Institutional Controls

The PRPs placed ICs on a portion of the Site to prevent activities that would disturb the Site's soil without prior approval from the EPA and North Carolina Department of Environmental Quality (previously the NC DENR). The ICs also limit future use of the Site to commercial and industrial uses.

The North Carolina Department of Health and Human Services issues and oversees fish consumption advisories. There are fish consumption advisories on Little Brier Creek, Brier Creek, Lake Crabtree, and Crabtree Creek, all of which are waters downstream of the Site. ICs, like the continuance or enhancement of fish advisories and signs, and the implementation of educational and community outreach programs help reduce the potential risks to humans through fish consumption.

Section 3.0 Community Background

3.1 Community Profile

Raleigh

The City of Raleigh consists of 145.3 square miles and is the capital of the State of North Carolina and the seat of Wake County. It is the second-largest city in the state after Charlotte. Raleigh is known as the "City of Oaks" for its many oak trees. The Neuse River flows through the northeast end of the city.

Raleigh is a full-service city with a population estimated at 470,509. All traditional city services are provided, such as police, public works, and recreation. As of 2011, *Time* ranked Raleigh as the third most educated city in the United States based on the percentage of residents who held college degrees. There are multiple public schools servicing Raleigh, as well as charter schools, magnet schools, private school, religion-based schools, and two colleges. Raleigh is home to North Carolina State University at Chapel Hill and is part of Research Triangle Park. Duke University and Johnston Community College are also located near Raleigh.

The city operates under a Council-Manager form of government where the City Council is responsible for legislative functions, such as establishing policy, passing local ordinances, and voting appropriations. The legislative body appoints a professional manager to oversee the administrative operations, implement policies, and advise the legislative body. The Raleigh City Council consists of eight members; all seats, including the Mayor, are open for election every two years. Five of the council seats are district representatives and two seats are citywide representatives elected at large.

Wake County

Wake County consists of 857 square miles and has an estimated population of 1,111,761. It is North Carolina's most populous county. It is located in the northeast central region of North Carolina. Most of Wake County features gently rolling hills that slope eastward toward the state's flat coastal plain. It is about three hours west of Atlantic Beach and four hours east of the Great Smoky Mountains. The County has three state parks: Falls Lake State Recreation Area, William B. Umstead State Park, and the Jordan Lake State Recreation Area, which is divided into the sections of Crabtree Creek and Reedy Creek.

Wake County is governed by the Wake County Board of Commissioners, coterminous with the Wake County Public School System, with law enforcement provided by the Wake County Sheriff's Department. The County offers services for energy management, environmental services, parks and recreation, an animal center, and global information system mapping. Wake County is home to eight institutions of higher learning, including Meredith College, North Carolina State University, Campbell University's Norman Adrian Wiggins School of Law, Peace College, Saint Augustine's College, Shaw University, Southeastern Baptist Theological Seminary, and Wake Technical Community College.

Demographics

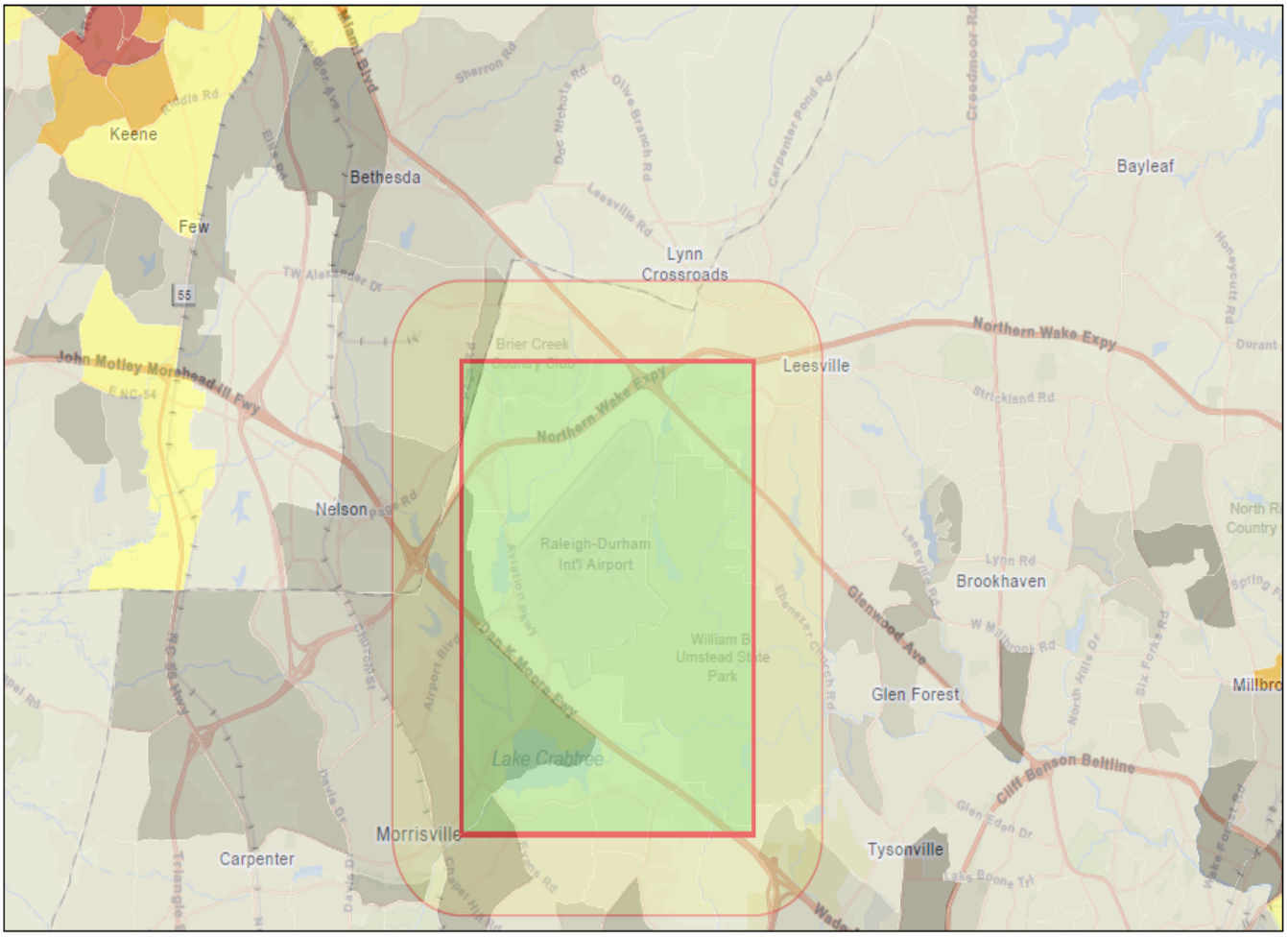
Demographic information provided through the EPA's Environmental Justice Screening and Mapping Tool (EJ Screen) was used to obtain pertinent demographic information for the area within a one-mile radius of the Site. The EJ Screen, shown below in Figure 2, combines the percentage of minority and low income populations into a color-coded graphic. This study area, which is shown in the rectangular buffer area, is composed of 48.20 miles with an approximate population of 49,855 individuals. The demographic index (or measure of where an area sits on the spectrum of development) for the study area is 26%.

When **per capita income** in a household is less than or equal to twice the federal poverty level, the household is considered to be a low income household. Fourteen percent of the population of the study area is considered low income. The U.S. Census Bureau American Community Survey indicates that the per capita income in this area is $44,581. In comparison, 37% of the population of North Carolina is low income and 33% of the population of the United States is low income.

Data for the EJ Screen indicates that 38% of the population is minority. When compared to minority populations in the State of North Carolina and the nation, 36% of North Carolina is comprised of minorities and 39% of the United States is comprised of minorities. The U.S. Census Bureau American Community Survey indicates that 65% of the population is Caucasian, 15% is Black or African American, 14% is Asian, and 5% is Hispanic.

Two percent of the population within the study area is short of a high school diploma, while 9% have graduated from high school. Twenty-three percent have some college education, 7% have their Associate's Degree, and 65% have their Bachelor's Degree or more.

Figure 2. Ward Transformer Superfund Site EJ Screen



3.2 History of Community Involvement

Community engagement and public outreach are integral to the EPA's Superfund process and have been since the EPA's involvement at the Site began. Since 2003 when the Site was added to the NPL, the EPA has conducted extensive community relations activities to inform and involve the community about the Site, including mailing information fact sheets, press releases, availability sessions, sampling plan development meetings, presentations, and public meetings. Below is a summary of community meetings conducted in Raleigh, North Carolina.

Event	Date
RI kick-off public meeting	March 13, 2003
RI findings meeting	November 16, 2004
Task force presentation	August 4, 2005
Sampling plan development meeting	October 27, 2005
Public availability session	January 19, 2006
Public meeting	June 21,2006
Public availability session	March 17, 2007
Proposed Plan public meeting for OU1	August 14, 2007

The OU1 RI/FS Report and Proposed Plan for the Site were made available to the public in August 2007. The notice of availability of these two documents was published in the *Durham Herald Sun* on August 6, 2007, and the *Raleigh News and Observer* on August 8, 2007. A public comment period was held from August 6, 2007, to September 4, 2007. An extension to the public comment period was requested, and as a result, the public comment period was extended to October 4, 2007.

In addition, a public meeting was held on August 14, 2007, to present the Proposed Plan to a broader community audience than those that had already been involved at the Site. This meeting was attended by approximately 40 citizens, and representatives from the EPA and NC DENR answered questions about the Site and the remedial alternatives. The EPA's response to the comments received during this period is included in the Responsiveness Summary, which is part of the ROD.

3.3 Key Community Concerns

Numerous comments were received during the August 6, 2007 to October 4, 2007 public comment period. In general, the comments were related to concerns regarding the **Preferred Alternative** and the need for additional sampling.

3.4 Response to Community Concerns

Information repositories were set up to provide information to the public about the selection of remedial alternatives. One is located in the North Regional Public Library in Raleigh, North Carolina, and the other is located in the EPA Regional information repository. Information has

been added to the repositories as additional investigations have been completed. Locations of the information repositories can be found in Appendix I.

Information about the Site is also available on an EPA website: https://www.epa.gov/superfund/WardTransformer, "EPA Superfund Program: Ward Transformer Superfund Site." The website summarizes cleanup progress at the Site.

Public comments on the ROD are contained within the ROD, along with the EPA responses (ROD Appendix D, Responsiveness Summary). The EPA also encouraged the public to submit comments through traditional mail and electronic mail.

3.5 Summary of Communication Needs

During the comment period it was requested that data for the Site be provided to citizens of Wake County and downstream communities.

Section 4.0 EPA's Community Involvement Program

The overall goal of the EPA's Community Involvement Program is to promote two-way communication between citizens and the EPA and to provide opportunities for meaningful and active involvement by the community in the cleanup process. The EPA will implement the community involvement activities described below that are based on previous investigations and public concerns. It is the EPA's objective to solicit, listen to, and respond to suggestions about cleanup at the Site. Each suggestion identified during the interviews will be responded to with a set of tools that the EPA will use to improve communication and active involvement in the cleanup process.

4.1 Long-Term Monitoring

An ongoing part of the Superfund process is the production of FYR reports to evaluate the success of remediation and to monitor the performance of long-term operations. The EPA analyzes sampling results and observations and applies technical expertise when developing recommendations and conclusions for FYR reports. The reports determine whether the selected remedial actions are protective of human health and the environment. Interviews are an integral part of the FYR process. They provide the EPA with valuable insight and suggestions. The EPA will use the following tools to address the issue of long term monitoring.

Develop Five-Year Reviews

- ***Objective:*** Prepare and distribute ongoing comprehensive FYR reports for the Site to evaluate the implementation and performance of site remedies and determine whether they remain protective of human health and the environment.
- ***Method:*** The EPA will notify the public in the local newspaper when each FYR report is available.
- ***Timing:*** The EPA will make available the FYR reports every five years, until site closure.

Conduct interviews during production of future Five-Year Reviews

- ***Objective:*** Provide an opportunity for the EPA to solicit knowledge and understanding from those involved in cleanup and from the community about the protectiveness of remedial activities at the Site.
- ***Method:*** The EPA will schedule interviews with people willing to participate in the interview process.
- ***Timing:*** Interviews will occur every five years to coordinate with production of FYR reports.

4.2 Partnership Development

The EPA Community Involvement Coordinator (CIC) is available to support partnership development between site PRPs and the community. The EPA's methods for supporting partnerships that increase the breadth of understanding and the depth of involvement are defined below.

Designate an EPA CIC

- ***Objective:*** Provide a primary liaison between the community and the EPA and to ensure prompt, accurate, and consistent responses and information dissemination about the Site. In instances where the EPA's CIC may be unable to provide adequate information (such as on technical issues), the CIC will direct inquiries to the appropriate EPA contact.
- ***Method:*** The EPA's CIC will support partnership development, handle site inquiries, and serve as a point of contact for community members. The CIC is appointed by the Region 4 Headquarters. Angela Miller is the EPA CIC assigned to the Site. She will work closely with the EPA Remedial Project Manager (RPM), Hilary Thornton.
- ***Timing:*** The CIC will be available until the Site is officially closed.

Provide opportunities to involve community groups in cleanup at the Site

- ***Objective:*** Share information with and collect ideas from local community groups to address mutual concerns, engage in constructive dialogue, and increase involvement in environmental cleanup decision making at the Site.
- ***Method:*** When appropriate, the EPA will support gatherings of community groups or others and provide materials and expertise for stakeholders that attend.
- ***Timing:*** As needed and as appropriate.

Prepare and distribute Site Fact Sheets and technical summaries

- ***Objective:*** To provide community groups and interested community members with current, accurate, easy-to-read, easy-to-understand information about the Site.
- ***Method:*** Fact Sheets will be created and mailed to all parties on the Site mailing list and/or distributed to partnership members. In addition, copies will be available in the Information Repository.
- ***Timing:*** The EPA will prepare and distribute Fact Sheets as needed.

4.3 Enhance Communication

The EPA has established a variety of communication methods that help refine communication with the community. The **Administrative Record** is available to the public and is the compilation of information used in selecting the preferred cleanup remedy and includes the Final CIP and FYRs. The Administrative Record for the Site is located in the information repositories (locations in Appendix I). Technical information may be obtained by contacting the CIC (contact

information is in Appendix A) who may redirect your request to appropriate sources of information. Additionally, the EPA's website provides information to those with computers, and the mailing list may be another means to convey meeting information, announce cleanup milestones, or comment periods. CIP updates involve evaluating and improving the Community Involvement Program. The EPA's use of all these tools to enhance communication are described below.

Establish and maintain the Administrative Record

- ***Objective:*** Provide residents with a paper trail of all documents, resources, and material used by the EPA RPM and Site Team in reaching all decisions about the Site and its cleanup.
- ***Method:*** The EPA will provide at least two sets of the Administrative Record for the Site, one in the EPA Region 4 offices located at 61 Forsyth Street, SW, Sam Nunn Atlanta Federal Center, 9th Floor, Atlanta, Georgia, and the other in the local information repository in the North Regional Public Library, 7009 Harps Mill Road, Raleigh, North Carolina
- ***Timing:*** The Administrative Record is open as soon as site investigation begins and remains open until the Site receives closure status.

Establish and maintain information repositories

- ***Objective:*** To provide a convenient location where residents can go to read and copy official documents and other pertinent information about the Site and EPA activities.
- ***Method:*** The repository is a reference collection of site information containing the Administrative Record file, other site-specific information, the CIP, and information about the general Superfund process. The CIC will work with a local contact to maintain the local repository. This repository will be accessible to the physically challenged, will have copier facilities, and will be available to residents during normal business hours and at least some evening and/or weekend hours. Additionally, an information repository is available in the EPA Region 4 Headquarters in Atlanta, Georgia.
- ***Timing***: The EPA adds new documents to the repositories as they become available.

Provide Site and Superfund information on the Internet

- ***Objective:*** Provide key resources for searching and listing both general and specific information about Superfund and hazardous waste issues.
- ***Method:*** The following include methods to locate Site and Superfund information on the internet:
    - A Site Status Summary for the site can be found at: https://www.epa.gov/superfund/WardTransformer
    - Information about the EPA and Superfund can be found through the EPA's website at http://www.epa.gov

- Information about the Site can also be accessed via EPA Region 4's website at https://www.epa.gov/aboutepa/about-epa-region-4-southeast
- The Proposed Plan and the ROD for the Site are also on the internet as they are completed at: https://www.epa.gov/superfund/search-superfund-decision-documents

- ***Timing:*** Site Status Summaries are periodically updated.

Maintain an updated mailing list for the Site

- ***Objective:*** Facilitate the distribution of site-specific information to everyone who needs or wants to be kept informed about the Site.
- ***Method:*** The EPA will update the Site mailing list that includes all residences adjacent to the Site, in known or suspected paths of migration, or those otherwise affected by the Site. The EPA will also solicit interested parties during interviews, public meetings, and public availability sessions.
- ***Timing:*** The EPA will review/revise the mailing list periodically to keep it current.

Revise CIP

- ***Objective:*** Identify and address community needs, issues, or concerns regarding the Site. As FYRs occur, the CIP will undergo revision.
- ***Method:*** Community interviews will serve as the basis for CIP revisions and improvement of the Community Involvement Program.
- ***Timing:*** Revisions occur with FYRs.

4.4 Time Frame Summary for Community Involvement Activities

ACTIVITY	TIME FRAME
Develop Five-Year Reviews	**Every five years**
Conduct interviews during production of Five-Year Reviews	**Every five years**
Designate an EPA CIC	**Ongoing**
Prepare and distribute site fact sheets and technical summaries	**As needed**
Provide opportunities to involve community groups in cleanup at the Site	**As needed or requested**
Maintain a mailing list for the Site	**Ongoing**
Establish and maintain information repositories	**Established, update as needed**
Provide Site and Superfund information on the Internet	**Currently available; update as needed**
Establish and maintain the Administrative Record	**Established, update as needed**
Solicit comments during a Public Comment Period	**As needed and required**
Revise the CIP	**As needed, at least every 5 years**

Appendix A EPA Regional Contacts

Hilary Thornton
Remedial Project Manager
U.S. EPA, Region 4
61 Forsyth St., S.W.
Suite 9T25
Phone: 404-562-8809
E-mail: Thornton.Hilary@Epa.gov

Angela Miller
Community Involvement Coordinator
U.S. EPA, Region 4
61 Forsyth St., S.W.
Suite 9T25
Phone: 404-562-8561
E-mail: Miller.Angela@Epa.gov

Appendix B Local Officials

City of Raleigh Mayor
Mary-Ann Baldwin
P.O Box 1746
Raleigh, NC 27602
Phone: 919-996-3050
mary-ann.baldwin@raleighnc.gov

City Council Members
Jonathan Melton, Council Member, At-large
Nicole Stewart, Council Member, At-large
Patrick Buffkin, Council Member, District A
David Cox, Council Member, District B
Corey Branch, Council Member, District C
Saige Martin, Council Member, District D
David Knight, Council Member, District E

City Manager
Ruffin L. Hall
Raleigh Municipal Building
2nd Floor
22 W. Hargett Street
Raleigh, NC 27601
Phone: 919-996-3070

Fire Department
Brad Harvey, Fire Chief
Raleigh Fire Station 24
10440 Fossil Creek Court
Raleigh, NC 27617
Phone: 919-996-6115

Police Department
Cassandra Deck-Brown, Chief
8016 Glenwood Ave #1950
Raleigh, NC 27612
Phone: 919-996-2300

Indian River County Sherriff
Gerald M. Baker, Sheriff
330 S Salisbury Street
Raleigh, NC 27601
Phone: 919-856-6911

Appendix C State Officials

State Senate – District 15
Senator Jay J. Chaudhuri

District Office
NC General Assembly Legislative Building
16 West Jones Street
Room 1120
Raleigh, NC 27601
Phone: 919-715-6400
Jay.Chaudhuri@ncleg.net

State House – District 34
Representative Grier Martin

District Office
NC General Assembly Legislative Building
16 West Jones Street
Room 1023
Raleigh, NC 27601
Phone: 919-733-5773
Grier.Martin@ncleg.net

Governor
Roy Cooper
North Carolina Office of the Governor
20301 Mail Service Center
Raleigh, NC 27699
Phone: 919-814-2000

North Carolina Department of Environmental Quality
Rohit Balakrishna Warrier
Remedial Project Manager
217 West Jones Street
Raleigh, NC 27603
Phone: 919-707-8352
Rohit.Warrier@NCDENR.gov

Appendix D Federal Elected Officials

U.S. Senate

Senator Richard Burr
Washington Office
217 Russell Senate Office Building
Washington, DC 20510
Phone: 202-224-3154

Senator Thom Tillis
Washington Office
113 Dirksen Senate Office Building
Washington, DC 20510
Phone: 202-224-6342

U.S. House of Representatives

4th Congressional District
Representative David Price
Washington Office
2108 Rayburn Building
Washington, DC 20515
Phone: 202-225-2014

Appendix E Environmental and Active Citizens Groups

Neuse Riverkeeper Foundation
19 W Hargett Street
Raleigh, NC 27601
Phone: 919-856-1180

Neuse River Foundation
612 W. Lane Street
Raleigh, NC 27603

North Carolina Wildlife Federation
1346 St Julien Street
Charlotte, NC 28205
Phone: 704-332-5696

Appendix F Potentially Responsible Parties

There are over 123 site PRPs including:

Ward Transformer
Ward Transformer Company, Inc.
Ward Ventures, LLC

Appendix G Media Contacts

Television Stations:

WUNC (PBS Channel 4)
10 UNC-TV Drive
Research Triangle Park, NC 27709
Phone: 919-549-7000

WRAL-TV (NBC Channel 5)
2619 Western Boulevard
Raleigh, NC 27605
Phone: 919-821-8555

WTVD (ABC Channel 11)
411 Liberty Street
Durham, NC 27701
Phone: 919-683-1111

WNCN (CBS Channel 17)
1205 Front Street
Raleigh, NC 27609
Phone: 919-836-1717

WLFL (CW Channel 22)
3012 Highwoods Boulevard
Suite 101
Raleigh, NC 27604
919-872-9535

WRAZ (Fox Channel 50)
2619 Western Boulevard
Raleigh, NC 27605
Phone: 919-821-8555

Radio Stations:

WUNC (91.5 FM)
CB# 6230 Swain Hall
Chapel Hill, NC 27599
Phone: 919-966-5454

WWPL (96.9 FM)
3012 Highwoods Boulevard
Raleigh, NC 27609
Phone: 919-790-9392

W253CY (98.5 FM)
3012 Highwoods Boulevard
201
Raleigh, NC 27604

WDCG (105.1 FM)
3100 Smoketree Court
Suite 700
Raleigh, NC 27604
919-878-1500

Newspapers:

Durham Herald Sun
1530 N Gregson Street
Suite 2A
Durham, NC 27701
Phone: 919-419-6500

Raleigh News and Observer
421 Fayetteville Street
Suite 104
Raleigh, NC 27601
Phone: 800-522-4205

Appendix H Meeting Locations

Hilton North Raleigh
3415 Wake Forest Road
Raleigh, North Carolina 27609
Phone: 919-872-2323

Appendix I Repository Locations

Local Repository:

North Regional Public Library
7009 Harps Mill Road
Raleigh, NC 27615
Phone: 919-870-4000

Hours Open to Public*:
Monday – Thursday: 9 a.m. – 8 p.m.
Friday: 9 a.m. – 6 p.m.
Saturday: 9 a.m. – 5 p.m.
Sunday: 1 p.m. – 6 p.m.

Currently closed for public service due to COVID-19. However, curbside delivery is available Monday – Friday 10 a.m. – 6 p.m.

*Hours may be subject to change.

EPA Region 4 Repository:

U.S. Environmental Protection Agency
61 Forsyth Street, SW
Sam Nunn Atlanta Federal Center, 9th Floor
Atlanta, GA 30303
Phone: 404-562-8190
R4-library@epa.gov

Hours Open to Public*:
Monday – Friday 9 a.m. – 3:00 p.m.

Currently closed due to COVID-19 until further notice.

Appendix J Glossary

Administrative Order of Consent (AOC): Requires parties to undertake a response action. The EPA can issue an order when it finds there may be an imminent and substantial endangerment to the public health or environment.

Administrative Record: All documents which the EPA considered or relied on in selecting the response action at a Superfund site, culminating in the Record of Decision for remedial action or, an action memorandum for removal actions, usually placed in the information repository near the site.

Aroclor: The trade name of commercial PCB mixtures.

Cleanup: Actions taken to correct a release or threatened release of hazardous substances that could affect public health and/or the environment.

Comprehensive Environmental Response, Compensation and Liability Act (CERLA): Also known as **Superfund**, is a federal law passed in 1980 and modified in 1986 by the Superfund Amendment and Reauthorization Act; the act created a trust fund to investigate and cleanup abandoned or uncontrolled hazardous waste sites. The law authorizes the federal government to respond directly to releases of hazardous substances that may endanger public health or the environment. The EPA is responsible for managing the Superfund.

Contaminants of Concern: Constituents associated with a site which have been released into the environment.

Dioxins and Furans: Dioxins and furans is the abbreviated or short name for a family of toxic substances that all share a similar chemical structure. Dioxins, in their purest form, look like crystals or a colorless solid. Most dioxins and furans are not man-made or produced intentionally, but are created when other chemicals or products are made. Of all of the dioxins and furans, 2,3,7,8-tetrachlorodibenzo-p-dioxin is considered the most toxic.

Groundwater: The supply of fresh water found beneath the Earth's surface (usually aquifers) which is often used for supplying wells and springs.

Information Repository: A file that contains accurate, up-to-date documents on a Superfund site. The file is usually located in a public building (school, library, or city hall) convenient for local residents.

Institutional Control (IC): Restriction that prevents the owner from inappropriately developing the property. The restriction could be implemented as a "deed restriction" and is designed to prevent harm to workers or potential residential development.

Low-Temperature Thermal Desorption (LTTD): Separates contaminants from soil. Soil is heated in a chamber in which water, organic contaminants and certain metals are vaporized.

Monitored Natural Recovery (MNR): Remediation practice that relies on natural processes to protect the environmental and receptors from unacceptable exposures to contaminants.

National Pollutant Discharge Elimination System (NPDES): Addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to state governments by the EPA to perform permitting, administrative, and enforcement aspects of the program.

National Priorities List (NPL): The list of hazardous waste sites in the United States eligible for long-term remedial action (cleanup) financed under the federal Superfund program.

Operable Unit (OU): During cleanup, a site can be divided into a number of distinct areas depending on the complexity of the problems associated with the site. These areas, called operable units, may address geographic areas of a site, specific site problems, or areas where a specific action is required.

Per Capita Income: Measure of the average income earned per person in a given area in a specified year. It is calculated by dividing the area's total income by its total population.

Polychlorinated biphenyl (PCB): Organic chlorine compound once widely deployed as dielectric and coolant fluids in electrical apparatus, carbonless copy paper and in heat transfer fluids. With the discovery of PCBs' environmental toxicity, and classification as persistent organic pollutants, their production was banned in 1978. The International Agency for Research on Cancer rendered PCBs as definite carcinogens in humans.

PCB Congener: A unique chemical compound in the PCB category.

Potentially Responsible Party (PRP): Individual(s) or company(ies) potentially liable for, or contributing to, creation of a Superfund site.

Preferred Alternative: The EPA develops and evaluates ways to best cleanup contamination at a site. The preferred alternative is selected after comparing all alternatives to nine established Superfund criteria and requesting community input into the selection process.

Proposed Plan: A Superfund public participation fact sheet which summarizes cleanup alternatives, the rationale for their selection, and presents the best method for cleanup (preferred alternative) for public comment.

Public Comment Period: The time allowed for the public to express its views and concerns regarding an action by the EPA (e.g. a Federal Register Notice of proposed rule-making, a public notice of a draft permit, or a Notice of Intent to Deny).

Record of Decision (ROD): A public document describing the EPA's rationale for selection of a Superfund cleanup alternative.

Remedial Investigation/Feasibility Study (RI/ FS): A two-part investigation conducted to fully assess the nature and extent of the release, or threat of release, of hazardous substances, pollutants, or contaminants, and to identify alternatives for clean-up. The Remedial Investigation gathers the necessary data to support the corresponding Feasibility Study.

Remedial Action - Remedial action follows the Remedial Design phase and involves the actual construction or implementation stage of the cleanup.

Remedial Design: Remedial design is the phase in the Superfund site cleanup process in which the technical specifications for cleanup remedies and technologies are developed.

Remedy: Long-term action that stops or substantially reduces a release or threat of a release of hazardous substances.

Responsiveness Summary: A summary of oral and written comments received by the EPA during a comment period on key EPA documents, and the EPA's responses to those comments. The responsiveness summary is a key part of the ROD, highlighting community concerns for EPA decision-makers.

Risk Assessment: The process or method of identifying hazards and risk factors that have the potential to cause harm.

Superfund: The program operated under the legislative authority of CERCLA that funds and carries out EPA long-term removal and remedial activities.

Unilateral Administrative Order (UAO): These orders require parties to undertake response action for cleanup. EPA can issue a UAO when it finds there may be an imminent and substantial endangerment to public health or the environment.

Appendix K Acronym List

AOC	Administrative Order of Consent
bgs	below ground surface
BHHRA	Baseline Human Health Risk Assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIC	Community Involvement Coordinator
CIP	Community Involvement Plan
COC	Contaminant of Concern
EJ Screen	Environmental Justice Screening and Mapping Tool
EPA	United States Environmental Protection Agency
ft	feet
FYR	Five-Year Review
IC	Institutional Control
LTTD	Low-Temperature Thermal Desorption
mg/kg	milligrams per kilogram
MNR	Monitored Natural Recovery
NC DENR	North Carolina Department of Environmental and Natural Resources
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OU	Operable Unit
PCB	Polychlorinated biphenyl
PRP	Potentially Responsible Party
PWS	Public Water System
RDU	Raleigh-Durham International Airport
RI/FS	Remedial Investigation/Feasibility Study
RPM	Remedial Project Manager
ROD	Record of Decision
Site	Ward Transformer OU1 Superfund Site
SWTP	Stormwater Treatment Plant
TCRA	Time-Critical Removal Action
UAO	Unilateral Administrative Order

Appendix L References

City of Raleigh, North Carolina website: https://raleighnc.gov/; accessed July 13, 2020

City of Raleigh, North Carolina Wikipedia website: https://en.wikipedia.org/wiki/Raleigh,_North_Carolina; accessed July 13, 2020

U.S. Environmental Protection Agency, Record of Decision for the Ward Transformer Superfund Site Operable Unit 1, dated September 2008

U.S. Environmental Protection Agency, Ward Transformer Superfund Site, Raleigh, North Carolina website: https://www.epa.gov/superfund/WardTransformer, accessed July 10, 2020

Wake County, North Carolina website: http://www.wakegov.com; accessed July 13, 2020

Wake County, North Carolina Wikipedia website: https://en.wikipedia.org/wiki/Wake_County,_North_Carolina; accessed July 13, 2020

Ward Transformer Toxic Sites website: http://www.toxicsites.us/site.php?epa_id=NCD003202603; accessed July 13, 2020