

# **QUALITY ASSURANCE PROJECT PLAN/SITE SAMPLING PLAN**

**PINEVILLE TEXTILE MILL  
436 CONE AVENUE  
PINEVILLE, MECKLENBURG COUNTY, NORTH CAROLINA  
EPA TDD No. GSA-03-012**

**Revision 1**

**Prepared for:**

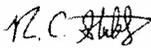
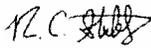
**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303**

**Prepared by:**

**Oneida Total Integrated Enterprises  
1220 Kennestone Circle, Suite 106  
Marietta, Georgia 30066**

Contract No.	:	GS00F0006L
Task Order No.	:	EP-G144-00231
Date Submitted	:	September 22, 2014
EPA Task Monitor	:	Brian Englert
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**QUALITY ASSURANCE PROJECT PLAN  
U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)  
REGION 4  
ONEIDA TOTAL INTEGRATED ENTERPRISES (OTIE) – CONTRACT GS00F0006L**

<b>SECTION A: Project Planning Elements</b>			
<b>AI. Title (Project Name):</b>	Pineville Textile Mill		
<b>Project Location:</b>	The parcel is located at 436 Cone Avenue, Pineville, Mecklenburg County, North Carolina (Figures 1 and 2, Appendix A). The geographic coordinates for an approximate center point of the site are 35.083789 North latitude and -80.894897 West longitude.		
<b>Location Description:</b>	<p>The property consists of one parcel identified as parcel 22105107 and occupies approximately 28.3 acres. It is located in an urban area that is a mixture of commercial and residential properties. The parcel is bordered by transportation corridors consisting of City streets (Dover Street, Hill Street, and Cone Avenue). It was the site of the former Cone Mills Corp Pineville Plant (RCRA ID NCD003184488).</p> <p>The parcel is bordered by a Norfolk Southern railway followed by Jack D. Hughes Community Park to northwest; an office building followed by a residential property, a vacant lot, and a Town of Pineville municipal office building to the northeast; Dover Street and Cone Avenue followed by residential properties to the east; Cone Avenue followed by residential properties to the south; Fisher Street and Hill Street followed by residential properties and a Masonic lodge to the southwest; and a Norfolk Southern railway followed by a wooded parcel to the west. Sugar Creek, a tributary of the Catawba River, runs east to west approximately 1,000 feet north of the parcel.</p>		
<b>Originating Organization:</b>	OTIE, 1220 Kennestone Circle, Suite 106, Marietta, Georgia (GA)		
<b>Document Version/Date:</b>	Revision 1 / September 22, 2014		
<i>Approvals</i>			
<b>Approved By:</b>	Ryan Stubbs	<b>Date:</b>	<b>Signature:</b>
<b>Title</b>	OTIE Project Manager	09/22/2014	
<b>Approved By:</b>	Ryan Stubbs	<b>Date:</b>	<b>Signature:</b>
<b>Title</b>	OTIE Technical Reviewer	09/22/2014	
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<b>Title</b>	OTIE Editorial Reviewer	09/22/2014	
<b>Approved By:</b>	Brian Englert	<b>Date:</b>	<b>Signature:</b>
<b>Title</b>	USEPA Task Monitor (TM)	9/20/14 xx/xx/xx	

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<b>A2. Table of Contents</b>	See Page i	
<b>A3. Distribution List</b>	Katrina Jones	USEPA Region 4 Contract Manager
	Darryl Walker	USEPA Region 4 Contract manager
	Brian Englert	USEPA Region 4 On-Scene Coordinator
	OTIE Files	OTIE, Marietta, GA
<b>A4. Project/Task Organization</b>		
<b>Project Personnel</b>	<b>Organization</b>	<b>Responsibilities</b>
<i>See attached organizational chart</i>		
<b>A5. Project Definition and Background</b>		
<p>The purpose of this project is to perform a Removal Site Evaluation (RSE) at the site. Field activities will include the collection of environmental samples documenting the presence or absence of hazardous materials on site.</p> <p>According to tax records the site was first developed in the early 1900s as a light manufacturing facility. The primary structures on the site are 8 warehouse-type and office-type buildings. All of the buildings are single-story. The majority of the buildings are constructed primarily of brick with concrete slabs.</p> <p>In 1894, a coterie of Charlotte stockholders formed Dover Yarn Mills and established the cotton mill in Pineville. In 1908, the mill was acquired by the Chadwick-Hoskins Company of Charlotte, and was known as Mill No. 5. In 1915, Mill No. 5 at Pineville was manufacturing white cotton sheeting. During the 1920s, Chadwick-Hoskins expanded and updated its Pineville plant. The North Carolina Bureau of Labor and Printing reported in 1925 that the Pineville textile plant was manufacturing gingham in addition to new lines of assorted “cotton goods”. In 1946 Chadwick-Hoskins was acquired by the expanding Cone Mills Corporation of Greensboro, North Carolina. Cone Mills installed new machinery to produce cotton jeans, and in the ensuing decades expanded and modernized the Pineville mill. In 1991, Cone Mills shut down the Pineville plant. In 2003 Cone Mills filed for bankruptcy and its assets sold. The mill complex remains closed and the equipment and portions of the interior woodwork, included the wood flooring, have been stripped and sold.</p> <p>The analytical data gathered and the findings of the field investigation will be used to prepare a RSE Report.</p>		
<b>A6. Project Description:</b>		
<p>The scope of this RSE is to conduct sampling and analysis as well as Hazard Categorization (hazcat) testing activities at the site to 1) identify any hazardous wastes, particularly polychlorinated biphenyls (PCB), which may be remaining at the site in containers, tanks, drums, surface impoundments, or other bulk storage containers, and 2) identify any asbestos containing materials (ACM) present at the site. All sampling activities will be conducted in accordance with the EPA Science and Ecosystem Division Field Branches Quality Standards and Technical Procedures (SESD FBQSTP).</p> <p>Samples will be collected from all above-ground storage tanks (AST), from an underground sump of unknown volume, and from debris piles containing suspected ACM. The container contents will undergo hazcat testing off-site in order to identify hazardous characteristics for bulking and disposal purposes. Samples from wastewater</p>		

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<p>surface impoundments may also be collected to determine if the water or sludge pose a threat to human health and if it meets any of the definitions of hazardous waste given in 40 CFR 261.</p> <p>The analytical data gathered during this field investigation will provide USEPA with sufficient information to determine the need for further federal intervention under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Additional samples may be collected at the discretion of the On-Scene Coordinator.</p>	
Applicable regulatory information, actions levels, etc.	USEPA Resource Conservation and Recovery Act (RCRA) Hazardous Waste Listing (40 CFR 261)
Field Study Date:	September 23-25, 2014
Projected Lab Completion Date:	14 calendar days from the date of sample receipt at the laboratory to submittal of an Electronic Data Deliverable (EDD) and a Level II analytical data package.
Final Report Completion Date:	Analytical result tables will be prepared and provided to the EPA On Scene Coordinator (OSC) 3 days following receipt of the data from the laboratory,. Final report will be submitted 3 weeks following data receipt.

**A7. Quality Objectives and Criteria**

<b><i>Problem Statement</i></b>	A former textile manufacturing plant has been abandoned, and there is a potential for a release of hazardous substances, pollutants, or contaminants into the environment from drums, tanks, or other containers on site. There are also suspected ACMs at the site present in pipe insulation and debris.
<b><i>Identify the Decisions</i></b>	<p>This investigation will focus on determining if material stored in containers and debris could be classified as characteristically hazardous waste; therefore, the following primary decisions have been identified:</p> <ol style="list-style-type: none"> <li>1. Do the contents of AST, vessels, drums, and debris meet the definition of hazardous waste as defined at 40 CFR 261 or the definition of TSCA waste at 40 CFR Part 761?</li> <li>2. Does debris contain asbestos at levels dangerous to human health?</li> <li>3. Does the level of contamination warrant further EPA involvement?</li> </ol>
<b><i>Decision Inputs</i></b>	<p>The primary input needed to support the decision making process is reported analytical concentrations and hazcat results of contamination in waste, sludge, and debris samples collected from the site.</p> <p>Results used in the decision-making process will come from hazcat results, and analytical laboratory data for toxicity characteristic leaching procedure (TCLP), PCBs, and asbestos analyses. Laboratory analysis of the samples collected on site will be performed by TestAmerica laboratories.</p>
<b><i>Study Boundary</i></b>	<p>The media of interest include on-site sludges/oils and debris piles. The study boundaries include the study area, sample depth, temporal boundaries such as field investigation dates and turnaround times on analytical results, and physical boundaries.</p> <ul style="list-style-type: none"> <li>• The study area is the boundary of the site as shown in Figures 1 and 2 located in Appendix A.</li> <li>• Samples from on-site ASTs, underground sumps, vessels, and drums will</li> </ul>

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	<p>be collected and assessed using hazcat procedures to determine if characteristically hazardous waste is present.</p> <ul style="list-style-type: none"> <li>• Various bulk samples collected on-site from debris piles will be submitted to the laboratory for asbestos analysis.</li> <li>• Field investigation activities are scheduled to commence the week of September 22, 2014. Field investigation activities are expected to last 2-3 days. A standard turnaround time will be requested for final analytical results from the laboratory. An additional 3 weeks will be necessary to generate the report.</li> </ul>
<i><b>Decision Rule</b></i>	<p>The primary decisions in the DQO process for the site are:</p> <ol style="list-style-type: none"> <li>(1) Are the contents of the containers listed or characteristically hazardous wastes?</li> <li>(2) Is there asbestos in the debris piles which may pose a threat to persons working in the area?</li> </ol> <p>Waste samples will be collected and hazcat off site. Selected samples will be submitted to a certified laboratory for TCLP, and PCB analysis. In addition, various bulk samples will be collected on-site and submitted to a certified laboratory for asbestos analysis. Analytical and screening results will be used to determine if contaminants of concern exist on site and whether federal invention under CERCLA is needed.</p>
<i><b>Error Limits</b></i>	<p>This sampling effort is designed to sample in a study area of suspected contamination based on evidence gathered during previous investigations. However, random and systematic errors could be introduced during sample collection, sample handling and storage, sample analysis and data reduction. The QC measures set forth in this QAPP and the specific analytical methods will serve to minimize these errors. QC samples will be used to monitor the accuracy and precision of the sampling activity as well as the analytical process.</p>
<i><b>Optimize Sampling Design</b></i>	<p>The data collection activities will focus on identifying the presence or absence of contamination in the study area. Section B will describe sampling design in detail.</p>

**A8. Special Training/Certifications**

Individuals implementing this QAPP must receive, at a minimum, orientation to the project’s purpose, scope, and methods of implementation. This orientation is the responsibility of the Project Manager or designee.

Any field team members involved with sample collection or handling will have received 40-hour hazardous waste operations and emergency response (HAZWOPER – 29 CFR 1910.120) training.

The Health and Safety Officer will have received 8-hour supervisor training course (HAZWOPER – 29 CFR 1910.120). Any other safety-related training is defined in the project HASP.

The laboratories performing the analysis for this project will be certified under the National Environmental Laboratory Accreditation Conference (NELAC) in the State of North Carolina and National Voluntary Laboratory Accreditation Program (NVLAP) for Asbestos Analysis by PLM. The laboratory managers are responsible for ensuring that personnel training are current and documented as defined in the laboratory’s Standard Operating Procedures (SOP). It is the laboratory’s manager’s responsibility to determine specific training and certification needs, and for ensuring that any required training is documented.

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**A9. Documents and Records**

Field records that may be generated include the following:

<input checked="" type="checkbox"/>	Chains-of-Custody Forms	<input type="checkbox"/>	Field Instrument Calibration Logs
<input checked="" type="checkbox"/>	Field Monitoring and Screening Results	<input type="checkbox"/>	Soil Borings and Well Logs
<input checked="" type="checkbox"/>	Site Maps and Drawings	<input checked="" type="checkbox"/>	Health and Safety Plan
<input checked="" type="checkbox"/>	Photographic Log	<input checked="" type="checkbox"/>	Site Logbook
<input type="checkbox"/>	Waste Manifests	<input type="checkbox"/>	Access Agreements

Field documentation and records will be generated and maintained in accordance with the requirements presented in the following EPA Region 4 SESD FBQSTP: Control of Records (SESDPROC-002-R5), September 2010; Sample and Evidence Management (SESDPROC-005-R2), January 2013; and Logbooks (SESDPROC-010-R5), May 2013. These documents can be found at the following web address:  
<http://www.epa.gov/region4/sesd/fbqstp/index.html>.

OTIE will retain all file information related to the site in the Marietta, Georgia, OTIE office. Upon EPA request, the entire site file, including all documents generated under the work assignment, will be inventoried and submitted to EPA or to an EPA-designated location within three weeks of the request. In addition, OTIE will provide digital copies of all documents generated under the work assignment, including reports, e-mails, and figures if requested by EPA. All documents generated for the work assignment are the property of EPA and will be retained as part of EPA files. All EPA files will be delivered to EPA at the conclusion of the General Services Administration (GSA) contract.

OTIE will use the information collected at the site to complete a RSE Report, summarizing the existing conditions at the site, the field investigation activities, and the findings of sampling and hazcat analysis. Environmental and QA/QC analytical data will be evaluated and data tables will be attached to the report. Significant QA/QC issues regarding sample collection, handling, and analysis will be identified in the report.

A draft version of the report will be available for review and commenting by EPA within 3 weeks following the completion of the site investigation. A final version of the report will be available within 1 week following receipt of comments by EPA. Laboratory data will be released to the EPA OSC within 3 days of receipt from laboratory.

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**SECTION B: Data Generation and Acquisition**

**B1. Sampling Design**

OTIE has developed a sampling design to ensure that Data Quality Objectives (DQOs) are fulfilled for the sampling investigation. Specifically, the design takes into account data needs, key decisions, and environmental variables, such as physical and site constraints, and how the spatial and temporal boundaries of the contamination and population at risk will be identified. The sampling design presented in the following sections has been developed based on available information from EPA and previous site activities.

Approximately 40 drum samples, two AST samples, one underground sump sample, and three suspect ACM debris samples. Table 1, located in Appendix B, identify the sample analysis and types of samples proposed.

Sampling locations may change during the field investigation based on field observations by the EPA OSC.

**B2. Sampling Methods, General Procedures**

Sampling will be conducted in accordance with the following SESD FBSQTP:

- |   |   |
|---|---|
| <input type="checkbox"/> Ambient Air Sampling (SESDPROC-303-R4)                     | <input type="checkbox"/> Benthic Macroinvertebrate Sorting and Taxonomic Identification (SESDPROC-509-R1) |
| <input type="checkbox"/> Dye Tracer Measurements (SESDPROC-504-R0)                  | <input type="checkbox"/> Fish Field Sampling (SESDPROC-512-R3)  |
| <input type="checkbox"/> Fluvial Sediment Sampling (SESDPROC-500-R2)                | <input type="checkbox"/> Groundwater Sampling (SESDPROC-301-R2)   |
| <input type="checkbox"/> Hydrologic Studies (SESDPROC-501-R2)                       | <input type="checkbox"/> Marine Macroinvertebrates (SESDPROC-511-R2)                                      |
| <input type="checkbox"/> Multi-Habitat Macroinvertebrate Sampling (SESDPROC-508-R2) | <input type="checkbox"/> Porewater Sampling (SESDPROC-513-R0)   |
| <input type="checkbox"/> Potable Water Supply Sampling (SESDPROC-305-R1)            | <input type="checkbox"/> Pump Operation (SESDPROC-203-R2)   |
| <input type="checkbox"/> Reaeration Measurement By Diffusion Dome (SESDPROC-505-R2) | <input type="checkbox"/> Reaeration Measurement Using Krypton Gas (SESDPROC-506-R2)                       |
| <input type="checkbox"/> Sediment Oxygen Demand (SESDPROC-507-R2)                   | <input type="checkbox"/> Sediment Sampling (SESDPROC-200-R2)  |
| <input type="checkbox"/> Soil Gas Sampling (SESDPROC-307-R2)                        | <input type="checkbox"/> Soil Sampling (SESDPROC-300-R2)  |
| <input type="checkbox"/> Surface Water Sampling (SESDPROC-201-R1)                   | <input type="checkbox"/> Total Community Metabolism (SESDPROC-503-R2)                                     |
| <input type="checkbox"/> Trace Contaminant Sampling (SESDPROC-502-R2)               | <input checked="" type="checkbox"/> Waste Sampling (SESDPROC-302-R2)                                      |
| <input type="checkbox"/> Wastewater Sampling (SESDPROC-306-R2)                      | <input type="checkbox"/> Water Column Oxygen Metabolism (SESDPROC-504-R2)                                 |
| <input type="checkbox"/> Wipe Sampling (SESDPROC-304-R2)                            | <input type="checkbox"/> Other:   |

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Field measurements will be collected in accordance with the following SESD FBSQTP:

- |   |   |
|---|---|
| <input type="checkbox"/> Field DO Measurement<br>(SESDPROC-106-R2)                        | <input type="checkbox"/> Field Measurement of ORP<br>(SESDPROC-113-R0)      |
| <input type="checkbox"/> Field Measurement of Total Residue Chlorine<br>(SESDPROC-112-R2) | <input type="checkbox"/> Field pH Measurement<br>(SESDPROC-100-R2)          |
| <input type="checkbox"/> Field Specific Conductance<br>(SESDPROC-101-R3)                  | <input type="checkbox"/> Field Temperature Measurement<br>(SESDPROC-102-R3) |
| <input type="checkbox"/> Field Turbidity Measurement<br>(SESDPROC-103-R2)                 | <input type="checkbox"/> Field XRF Measurement<br>(SESDPROC-107-R2)         |
| <input checked="" type="checkbox"/> Global Positioning System<br>(SESDPROC-110-R3)        | <input type="checkbox"/> Groundwater Level Measurement<br>(SESDPROC-105-R1) |
| <input type="checkbox"/> In Situ Water Quality Mon<br>(SESDPROC-111-R2)                   | <input type="checkbox"/> Wastewater Flow Measurement<br>(SESDPROC-109-R3)   |
| <input type="checkbox"/> Other:   |   |

**AST/UST Sampling**

A grab sample will be collected from the bottom of the AST or other vessel using a bailer. The sample will be placed in an 8-ounce glass sample jar. Samples will be preserved and placed on ice in accordance with the FBQSTP Sample and Evidence Management (SESDPROC-005-R2) guidelines.

All field observations and descriptions will be recorded in the logbook.

**Drum Sampling**

A grab sample will be collected from the bottom of the drum or other filled vessel using a drum thief. The sample will be placed in a 8-ounce glass sample jar. Samples will be preserved and placed on ice in accordance with the FBQSTP Sample and Evidence Management (SESDPROC-005-R2) guidelines.

All field observations and descriptions will be recorded in the logbook.

**Debris Sampling**

A bulk sample will be collected from suspected ACMs located on-site in accordance with SESD FBSQTP Guidance Document for Bulk Sampling for Asbestos (SESDGUID-104-R1). The sample will be containerized in accordance with the FBQSTP Sample and Evidence Management (SESDPROC-005-R2) guidelines.

All field observations and descriptions will be recorded in the logbook.

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Sample containers used for sample collection will be QC grade purchased from Environmental Sampling Supply (ESS) and will be prepared according to the procedures contained in the EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers (OSWER Directive 93240.0-05).

The following lists the sampling equipment and supplies to be used during this investigation:

sampling instruments

- Handheld GPS - Trimble GeoXT
- TVA-1000 PID/FID
- Ludlum Radiation Meter

sampling supplies

- Disposable bailers
- Drum Thiefs
- Sludge Judges
- Coolers
- Ice
- Strapping tape
- Custody seals
- Printer
- Sample Jar labels

Decontamination supplies

- Buckets
- Brushes
- Water
- Aluminum foil
- Distilled water
- Paper towels

PPE

- Nitrile gloves
- Polycoat suits
- hand sanitizer
- hand soap
- water
- insect repellent
- hand wipes
- sunscreen

Other Items

- Logbooks

All investigation derived waste (IDW) will be managed according to the procedures found in the FBQSTP Management of Investigation-Derived Waste procedure (SESDPROC-202-R3). The following identifies the types of IDW that could be generated during the investigation. IDW will generally consist of personal protective equipment and used disposable sampling equipment. All IDW will be secured in a 55-gallon drum on site, until sample analytical results are received. If, in the best professional judgment of the FPL, personal protective equipment can be rendered non-hazardous, it will be double-bagged and deposited in an industrial waste container, as directed in the FBQSTP SESDPROC-202-R3. All field sampling equipment will be cleaned and decontaminated

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according to the FBQSTP Field Equipment Cleaning and Decontamination procedures (SESDPROC-205-R2).

**B3. Sampling Handling and Custody**

All samples will be collected, containerized, preserved, handled, and documented in accordance with the EPA FBQSTP and the EPA CLP Guidance for Field Samplers (CLPGFS) dated July 2007. The following activity procedures will be followed during field sampling:

- Sample and Evidence Management SESDPROC-005-R2
- Equipment Inventory and Management Procedure SESDPROC-108-R4
- Packing, Marking, Labeling, and Shipping of Environmental and Waste Samples SESDPROC-209-R2

Both hard and electronic copies of the referenced procedures, in addition to the site-specific HASP, will be maintained by the FPL for reference during all phases of the field sampling activities. Any deviations in sampling procedures specified in this QAPP/SSP will be documented, including the reason for the deviation, in the field logbooks.

**B4. Analytical Methods**

Waste samples will be submitted to TestAmerica laboratories for analysis of TCLP semivolatile organic compounds (SVOC), TCLP volatile organic compounds (VOC), TCLP RCRA metals, TCLP pesticides, TCLP herbicides and PCB. All samples will be analyzed according to the methods outlined in Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846) and Methods for Chemical Analysis of Water and Wastes. VOC analysis will be conducted by SW846-8260, SVOC analysis will be conducted by SW846-8270, Metals analysis will be conducted by SW846-6010B/7470, pesticides analysis will be conducted by SW846-8081, herbicides analysis will be conducted by SW846-8151, and PCB analysis will be conducted by SW846-8082.

In addition, asbestos analysis will be conducted by PLM 600.

Table 1 presented in Appendix B summarizes the analytical methods by sample matrix.

<b>SESD:</b>	N/A
<b>CLP:</b>	N/A
<b>Other:</b>	N/A

**B5. Quality Control**

<b>Field:</b>	<p>Quality control for field monitoring and measurements will be conducted in accordance with FBQSTP Field Sampling Quality Control (SESDPROC-011-R4).</p> <p>The following QC samples will be collected as part of this investigation:</p> <ul style="list-style-type: none"> <li>• Field duplicates at a rate of 1 per 10 samples</li> <li>• Matrix Spike/Matric Spike Duplicate (MS/MSD) samples at a rate of 1 per 20 samples.</li> </ul>
<b>Laboratory:</b>	SW846 methods describe the required accuracy, precision, sensitivity of the analysis required for this project.

**B6. Instrument/Equipment Testing, Inspection and Maintenance**

All equipment will be handled in accordance with the FBQSTP Equipment Inventory and Management procedure (SESDPROC-108-R4).

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**B7. Instrument/Equipment Calibration and Frequency**

All equipment will be calibrated according to the manufacturer's instructions. In addition, all equipment will be handled in accordance with the FBQSTP Equipment Inventory and Management procedure (SESDPROC-108-R4).

**B8. Inspection/Acceptance for Supplies and Consumables**

All critical supplies and consumables for this field investigation are inspected and maintained by the OTIE Field Team Leader.

**B9. Non-direct Measurements:**

Optional (Applicability of this item is site-specific).

**B10. Data Management**

The project manager will be responsible for ensuring that all requirements for data management are met. The reference materials generated during this investigation and included in the final reports will be submitted to the EPA OSC in electronic format on compact disc, and a Scribe database will be created for the analytical results. The Scribe database will be submitted to the EPA OSC with the final reports.

All field-generated data will be managed as part of the permanent field record for the project. All laboratory analytical data will be managed in accordance with the requirements of the methods, as well as the EPA Region 4 policy and applicable federal regulations. Finally, all field-generated data and other records generated or obtained during this project will be managed according to the requirements of EPA GSA Contract No. EP-W-05-053.

**SECTION C: Assessment/Oversight**

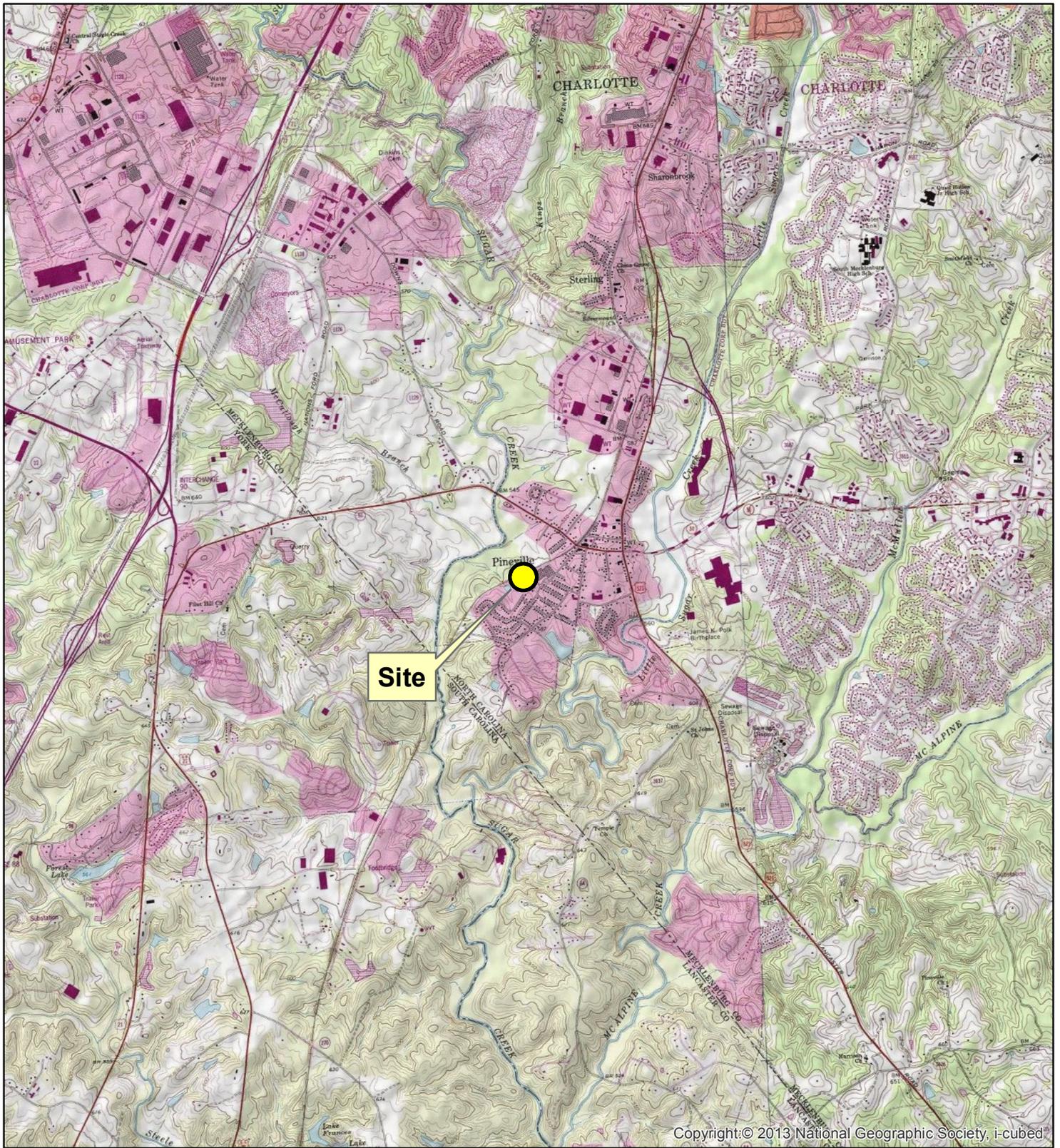
**C1. Assessments and Response Actions**

Assessments will be conducted during the field investigation according to the *SESD Operating Procedure for Project Planning* (SESDPROC-016-R1) to ensure the QAPP is being implemented as approved. The Project Manager is responsible for all corrective actions while in the field.

**C2. Reports to Management**

The Project Manager will be responsible for notifying the EPA TM if any circumstances arise during the field investigation that may adversely impact the quality of the data collected.

**APPENDIX A**  
**FIGURES**



Copyright: © 2013 National Geographic Society, i-cubed

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

**Legend**

 Site Location

0 0.5 1 Miles

 N

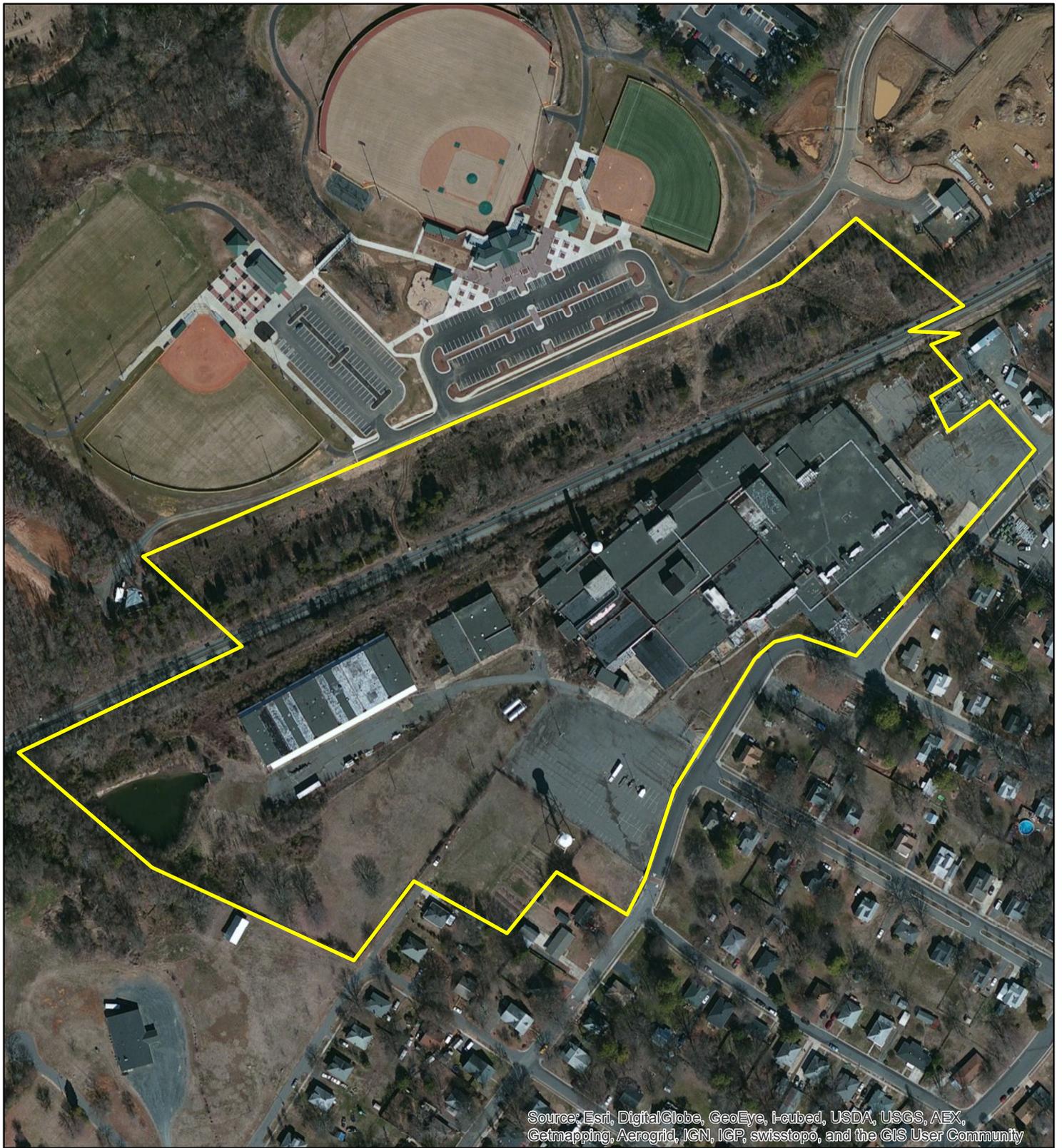


 United States Environmental Protection Agency

PINEVILLE TEXTILE MILL SITE  
PINEVILLE, MECKLENBURG COUNTY,  
NORTH CAROLINA  
TDD No. GSA-03-012

**FIGURE 1**  
**SITE LOCATION MAP**



Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

**Legend**

 Approximate Parcel Boundary

0 250 500 Feet



United States Environmental Protection Agency  
 PINEVILLE TEXTILE MILL SITE  
 PINEVILLE, MECKLENBURG COUNTY,  
 NORTH CAROLINA  
 TDD No. GSA-03-012

**FIGURE 2  
 AERIAL SITE MAP**



**APPENDIX B**  
**TABLES**

**TABLE 1  
ANALYTICAL METHODOLOGY, SAMPLE CONTAINERS, PRESERVATIVES, AND HOLDING TIME FOR SAMPLES  
PINEVILLE TEXTILE MILL**

Matrix	Analysis	EPA Method	Sample Container	Sample Only	Sample + MS/MSD	Preservative	Holding Time
Waste	TCLP SVOC	SW846-1311/8270D	8-oz glass Jar	1	1 (No Extra Vol)	Cool to 4 °C	14 days to extraction: 40 days to analysis
	TCLP RCRA 8 Metals	SW846-1311/6010/7470					
	TCLP VOC	SW846-1311/8260C					
	TCLP Herbicides	SW846-1311/8151					
	TCLP Pesticides	SW846-1311/8081					
	PCB	SW846-8082	4-oz glass Jar				
Bulk	Asbestos Fiber Content	EPA PLM 600	Zip top bag	1	N/A	N/A	NA

**Notes:**

°C - Degree Celsius

mL - Milliliter

PCB - Polychlorinated Biphenyls

oz - Ounce

RCRA - Resource Conservation and Recovery Act

SVOC - Semivolatile Organic Compounds

VOC - Volatile Organic Compounds

VOL - Volume

**TABLE 2**  
**RCRA HAZARDOUS WASTE TCLP COMPARISON LEVELS**  
**PINEVILLE TEXTILE MILL**

Analyte	RCRA Limits (mg/L)	Lab Reporting Limit (mg/L)	Method Detection Limit (mg/L)
Arsenic	< 5.0	0.5	0.072
Barium	< 100.0	10	0.05
Cadmium	< 1.0	0.1	0.005
Chromium	< 5.0	0.5	0.03
Lead	< 5.0	0.5	0.025
Selenium	< 1.0	0.5	0.02
Silver	< 5.0	0.1	0.05
Mercury	<0.2	0.002	0.0015
1,4-Dichlorobenzene	<7.5	0.01	0.0028
2,4,5-Trichlorophenol	< 400.0	0.03	0.004
2,4,6-Trichlorophenol	< 2.0	0.01	0.0036
2,4-Dinitrotoluene	<0.13	0.01	0.0067
Cresols	<200.0	0.02	0.014
Hexachlorobenzene	< 0.13	0.01	0.0034
Hexachlorobutadiene	< 0.5	0.01	0.0067
Hexchloroethane	< 3.0	0.01	0.0067
Nitrobenzene	<2.0	0.01	0.0024
Pyridine	<5.0	0.01	0.0045
Pentachlorophenol	< 100.0	0.03	0.0034
1,1-Dichloroethylene	<0.7	0.01	0.0025
1,2-Dichloroethane	<0.5	0.01	0.002
Methyl Ethyl Ketone	<200.0	0.5	0.026
Benzene	<0.5	0.01	0.002
Carbon Tetrachloride	<0.5	0.01	0.0018
Chlorobenzene	<100	0.01	0.0018
Tetrachloroethylene	<0.7	0.01	0.0025
Trichloroethylene	<0.5	0.01	0.002
Vinyl Chloride	<0.2	0.01	0.0024
Chloroform	<6.0	0.01	0.0023
2,4-D	<10.0	0.1	0.05
Silvex (2,4,5-TP)	<1.0	0.1	0.05
2,4,5-T	<1.0	0.1	0.05
gamma-BHC	<0.4	0.001	0.0001
Chlordane	<0.03	0.001	0.0007
Endrin	<0.02	0.001	0.0001
Heptachlor	<0.008	0.001	0.0001
Heptachlor epoxide	<0.4	0.001	0.0007
Methoxychlor	<10.0	0.001	0.0001
Toxaphene	<0.5	0.05	0.035

Total PCBs <50 mg/kg

**TABLE 2**  
**RCRA HAZARDOUS WASTE TCLP COMPARISON LEVELS**  
**PINEVILLE TEXTILE MILL**

**Notes:**

mg/L - milligrams per liter  
RCRA - Resource Conservation and Recovery Act  
PCB - Polychlorinated Biphenyl