DOWNTOWN DEVELOPMENT AUTHORITY of SOCIAL CIRCLE
PO BOX 310
SOCIAL CIRCLE, GA 30025

1. Applicant Identification
   Downtown Development Authority of Social Circle
   PO Box 310
   166 N Cherokee Road
   Social Circle, Georgia 30025

2. Website URL: https://www.socialcirclega.gov/

3. Funding Requested
   a. Grant Type: Single Site Cleanup
   b. Federal Funds Requested: $4,000,000

4. Location
   a) City of Social Circle, b) Walton County, c) Georgia

5. Property Information
   Social Circle Cotton Mill
   148 Cannon Drive, Social Circle, GA 30025

6. Contacts
   a. Project Director
      Mike Owens, Chairman
      770-464-2380
      mowens.ddasc@socialcirclega.gov
      PO Box 310
      166 N Cherokee Road
      Social Circle, Georgia 30025

   b. Chief Executive/Highest Ranking Elected Official
      David Keener, Mayor
      404-719-1279
      dkeener@socialcirclega.gov
      PO Box 310
      166 N Cherokee Road
      Social Circle, Georgia 30025

7. Population
   Social Circle, GA: 5,113 (US Census: 2019–2023 American Community Survey)

8. Other Factors

Other Factors	**Page #**
Community population is 15,000 or less.	1
The applicant is, or will assist, a federally recognized Indian Tribe or United States Territory.	N/A
The proposed site(s) is impacted by mine-scarred land.	N/A
Secured firm leveraging commitment ties directly to the project and will facilitate completion of the remediation/reuse; secured resource is identified in the Narrative and substantiated in the attached documentation.	2
The proposed site(s) is adjacent to a body of water (i.e., the border of the proposed site(s) is contiguous or partially contiguous to the body of water, or would be contiguous or partially contiguous with a body of water but for a street, road, or other public thoroughfare separating them).	N/A
The proposed site(s) is in a federally designated flood plain.	N/A
The reuse of the proposed site(s) will facilitate renewable energy from wind, solar, or geothermal energy.	N/A
The reuse of the proposed site(s) will incorporate energy efficiency measures.	2
The proposed project will improve local resilience to the impacts of extreme weather events and natural disasters.	3
The target area(s) is impacted by a coal-fired power plant that has recently closed (2015 or later) or is closing.	N/A

9. Releasing Copies of Applications
Not Applicable.

Threshold Criteria

1. **Applicant Eligibility**
   a. The Downtown Development Authority (DDA) of Social Circle, Georgia, is eligible to apply for the EPA Brownfields Cleanup Grant as a quasi-governmental entity operating under the supervision and control of the City of Social Circle defined under 2 CFR § 200.1. The Mayor and DDA Council created the DDA by resolution in 1984 pursuant to the Downtown Development Authority Law (1981 GA. Laws p.1744) to meet the revitalization and redevelopment needs of the central business district and to promote trade, commerce, industry, and public welfare. See attached resolution.
   b. The DDA is not exempt from Federal taxation under section 501(c)(4) of the Internal Revenue Code.

2. **Previously Awarded Cleanup Grants**
   The former Social Circle Cotton Mill site (the Mill) located at 148 Cannon Drive has not received funding from a previously awarded EPA Brownfields Cleanup Grant.

3. **Expenditure of Existing Multipurpose Grant Funds**
   The DDA does not have an open EPA Brownfields Multipurpose Grant.

4. **Site Ownership**
   The DDA is the current owner of the Mill site located at 148 Cannon Drive. The DDA acquired the property from Mill Preservation Group, LLC on XXXXX.

5. **Basic Site Information**
   a) Site Name: The Mill
   b) Site Address: 148 Cannon Drive, Social Circle, GA 30025

6. **Status and History of Contamination at the Site**
   a) The site is contaminated with hazardous substances.
   b) The site was developed as the Social Circle Cotton Mill in 1901 which included a warehouse and a three story 60,000 square foot main mill building where weaving, bailing, carding, roving, spinning, spooling, and cleaning was completed during production of cotton and polyester sheets. Several additional mill-related structures were built through the 1950s. Mill operations ceased in the early 1980s and in 1994 the primary mill building was severely damaged in a fire. Following the Mill's closure the site was leased out for various business purposes. In 2021 the primary mill building caught fire for a second time and sustained further damage. The mill has been vacant since the mid-2000s and is now overrun with kudzu.
   c) Contamination at the site includes arsenic concentrations as high as 188 milligrams per kilogram (mg/kg) in soil (Georgia Residential Type 1 Risk Reduction Standard is 20 mg/kg). Polycyclic aromatic hydrocarbons (PAHs), such as benzo(a)pyrene, are also present in soils at concentrations more than 40 times the residential risk reduction standard. Additionally, asbestos and lead based paint are present in building materials in the main mill, power station, water tower, and warehouses.
   d) Contamination at the site is due to historical releases from past textile mill operations likely associated with the use of coal to power the mill. The overall vertical and horizontal extent of

contamination in exceedance of residential risk reduction standards has been delineated. Approximately 3,550 ft^2 of soils are contaminated with PAHs to a depth no greater than 6ft and are confined to four areas in the central portion of the site. Additionally, approximately 222 cubic yards of arsenic impacted soils covering 1,200 ft^2 are present in the northeastern corner of the site. The total estimated tons of PAH and arsenic impacted soil on-site to be removed is 950 cubic yards. Additionally, asbestos containing materials identified on-site include asphaltic roofing, pipe insulation, pipe gaskets, window glazing compounds, corrugated cementitious siding, sealants, and paints. Lead paint with concentrations >0.5% was found on-site in paint samples collected from the main mill, power station, warehouses, and water tower.

7. <u>Brownfield Site Definition</u>

The DDA **affirms** that site is:
a) NOT a facility (or proposed for listing) on the National Priorities List (NPL);
b) NOT a facility subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA; and
c) NOT a facility that is subject to jurisdiction, custody, or control of the US government.

8. <u>Environmental Assessment Required for Cleanup Grant Applications</u>

The following site assessment reports have been completed for the site at 148 Cannon Drive:

- Phase I ESA: December 12, 2023 and October 31, 2025
- Asbestos and Lead Paint Inspection Report: September 10, 2024
- Phase II ESA: March 10, 2025 and December 3, 2025

9. <u>Site Characterization</u>

b. A current letter from the Georgia Brownfield Unit Program Manager is attached and confirms the DDA intends to enroll in the State Brownfield Program (which will provide oversight for the site), the site is eligible to be enrolled in the State Brownfield Program, and the site has a sufficient level of site characterization for the remediation work to begin.

10. <u>Enforcement or Other Actions</u>

The DDA **affirms** that there are no known ongoing or anticipated environmental enforcement or other actions related to the site for which Brownfield Grant funding is sought (148 Cannon Drive).

11. <u>Sites Requiring a Property-Specific Determination</u>

The DDA **affirms** that in accordance with Section 1.5 in the Information for Site Eligible for Brownfields Funding under CERCLA 104(k) and the information in 2.B.(11) of the FY26 Guidelines for Brownfield Cleanup Grants the site at 148 Cannon Drive does not require property-specific determination to be eligible for EPA Brownfield Grant funding.

12. Threshold Criteria Related to CERCLA/Petroleum Liability

a. Property Ownership Eligibility – Hazardous Substance Sites

i. EXEMPTIONS TO CERCLA LIABILITY

(1) Indian Tribes
Not Applicable.

(2) Alaska Native Village Corporations and Alaska Native Regional Corporations
Not Applicable.

(3) Property Acquired Under Certain Circumstances by Units of State and Local Government
Not Applicable.

ii. EXCEPTIONS TO MEETING THE REQUIREMENTS FOR ASSERTING AN AFFIRMATIVE DEFENSE TO CERCLA LIABILITY

(1) Publicly Owned Brownfield Sites Acquired Prior to January 11, 2002
Not Applicable.

iii. LANDOWNER PROTECTIONS FROM CERCLA LIABILITY

(1) Bona Fide Prospective Purchaser Liability Protection

(a) Information on the Property Acquisition

(i) The DDA acquired the property by negotiated purchase from Mill Preservation Group, LLC.

(ii) The DDA acquired the property on XXX.

(iii) The DDA is the sole owner of the property and has fee simple title.

(iv) The DDA purchased the property from Mill Preservation Group, LLC.

(v) The DDA does NOT have familial, contractual, corporate, or financial relationships or affiliations with any prior owners or operators of the site.

(b) Pre-Purchase Inquiry

(i) Several environmental site assessments were performed prior to the DDA's purchase of the property. The following are the primary documents detailing and summarizing the prior assessments.

- ASTM E1527-21 Phase I ESA dated December 12, 2023, prepared for DDA
- Asbestos and Lead Paint Inspection Report dated September 10, 2024, prepared for DDA
- Phase II ESA dated March 10, 2025, prepared for DDA
- ASTM E1527-21 Phase I ESA dated October 31, 2025, prepared for DDA
- Phase II ESA dated December 3, 2025, prepared for DDA

(ii) Terracon Consultants, Inc performed the most recent ASTM E1527-21 Phase I ESA. The Phase I ESA was performed under the supervision/direction of Gene

Partin (Senior Engineer), who meets the definition of Environmental Profession as defined in Section 312.10 of 40 CFR at the time of the report.

(iii) Not Applicable.

(c) Timing and/or Contribution Toward Hazardous Substance Disposal

All disposal of hazardous substances at the site occurred before the DDA acquired the property. The DDA has not caused or contributed to the release of any hazardous substances on the property. The DDA has not, at any time, arranged for the disposal of hazardous substances at the property or transported hazardous substances to the property.

(d) Post-Acquisition Uses

The property has not been used by the DDA since taking ownership on XXXX. The site has been vacant since acquisition.

(e) Continuing Obligations

(i) There are no known continuing releases at the site. Based on the planned cleanup and reuse of the site and typical state regulatory program (SRP) requirements, any residual impacts to soil and groundwater identified during cleanup activities will be mitigated through deed restrictions, thus fulfilling the DDA's continuing obligations regarding current releases of known hazardous substances found at the site.

(ii) The DDA will exercise appropriate care with hazardous substances found at the site by taking reasonable steps to prevent any future releases. No chemicals are stored on the property, and the property is vacant. The DDA repaired the fence along the property boundary to prevent future dumping and exposure to the previously released hazardous substances below the surface and within the structures. The planned cleanup activities will further prevent exposure to contaminants by users of the site and adjoining properties. The DDA intends to use Cleanup Grant funds to remove impacted soils within the vadose zone and remove hazardous building materials to repurpose existing structures. Based on the planned reuse of the site and typical requirements of the state regulatory program, residual impacts to soil and groundwater remaining after cleanup activities will be managed through deed restrictions, thus fulfilling the DDAs continuing obligations regarding future releases of known hazardous substances found at the site.

(iii) By preventing access to the site, not allowing excavations, and through the City's groundwater use ordinance, the DDA has prevented or limited exposure to any previously released hazardous substances. The planned cleanup activities will prevent and limit exposure to hazardous substances. The DDA intends to use Cleanup Grant funds to remove impacted soils within the vadose zone and remove hazardous building materials to repurpose existing structures. Based on the planned reuse of the site and typical requirements of the state regulatory program, residual impacts to soil and groundwater remaining after cleanup activities will be managed through deed restrictions, thus fulfilling the DDAs continuing obligations regarding preventing and limiting exposure to past releases of known hazardous substances found at the site.

The DDA confirms it is:

(i) complying with any land use restrictions and not impeding the effectiveness or integrity of any institutional controls;

(ii) assisting and cooperating with those performing the cleanup and provide access to the property;
(iii) complying with all information requests and administrative subpoenas that have or may be issued in connection with the property; and
(iv) providing all legally required notices.

Non-Publicly Owned Sites Acquired Prior to January 11, 2002
Not Applicable.

iv. SITES WITH HAZARDOUS BUILDING MATERIAL THAT IS NOT RELEASED INTO THE ENVIRONMENT

(1) The DDA confirms there have been no release and there is no threat of release of hazardous building materials into the outdoor environmental based on the site conditions.

b. Property Ownership Eligibility – Petroleum Sites

i. INFORMATION REQUIRED FOR A PETROLEUM SITE ELIGIBILITY DETERMINATION – Not Applicable.

13. Cleanup Authority and Oversight Structure

a. The DDA will comply with all applicable federal and state laws and ensure that the cleanup project protects human health and the environment. The DDA will hire via contract a qualified environmental professional to oversee and implement the cleanup project. The DDA intends to enroll in the State Brownfield Program through which the Georgia Environmental Protection Division will ensure cleanup activities are protective of human health and the environment. The State Brownfield Program will be intimately involved in the cleanup strategy and ensure appropriate measures are taken to sufficiently clean up the site and prevent future exposure risks.

b. Soil and groundwater impacts on-site were delineated within site boundaries during assessment activities, therefore gaining access to adjoining properties is not anticipated during cleanup activities.

14. Community Notification

a. Draft Analysis of Brownfield Cleanup Alternatives

The DDA announced its intent to apply for cleanup funding for the site located at 148 Cannon Drive and proposed redevelopment on December 26, 2025. A draft ABCA for the site and this application was made available on December 26, 2025, for public review and comment. These documents summarized information about:

- the site and contamination issues, cleanup standards, and applicable laws;
- the cleanup alternatives considered; and
- the proposed cleanup.

b. Community Notification Ad

A community notification ad requesting public input was published on December 26, 2025, in the local newspaper and through the City of Social Circle's website at https://www.socialcirclega.gov/departments/boards-and-commissions/downtown-development-authority. A copy of this grant application, including the draft ABCA, was made available for public review and comment on December 26, 2025.

c. Public Meeting

A presentation was made during a scheduled community meeting on January 12, 2026, at 9:00 a.m. The DDA documented participant attendance and comments made during the meeting.

d. Submission of Community Notification Documents

The following community notification documents are included as an attachment to this proposal:

- a copy of the draft ABCA;
- a copy of the ad that demonstrates notification to the public and solicitation for comments on the application and that notification to the public occurred at **14 days** before the application was submitted to the EPA;
- meeting notes from the public meeting; and
- meeting sign-in sheets/participant lists.

***There were no public comments received and therefore no responses** to those comments attached to this packet. *

15. Contractors and Named Subrecipients

- **Contractors.**
  Not Applicable.
- **Named Subrecipients.**
  Not Applicable.

Analysis of Brownfield Cleanup Alternatives

Social Circle Cotton Mill
148 Cannon Drive
Social Circle, Walton County, Georgia

USEPA Cooperative Agreement No. BF-02D29922-0
Acres Property ID # 258195
Terracon Project No. ES237025

Prepared for:
Downtown Development Authority of Social Circle
Social Circle, Georgia

Prepared By:
Terracon Consultants
Savannah, Georgia

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January 1, 2026

Downtown Development Authority of Social Circle Georgia
166 North Cherokee Road
Social Circle, Georgia 30025

Attn: Mr. Mike Owens
E: mowens.ddasc@socialcirclega.gov

Re: Analysis of Brownfield Cleanup Alternatives (ABCA)
Social Circle Cotton Mill
148 Cannon Drive
Social Circle, Walton County, Georgia
ACRES Property ID # 258195
EPA Cooperative Agreement No. BF-02D29922-0

Dear Mr. Owens:

Terracon Consultants, Inc. (Terracon) is pleased to provide Social Circle, GA this Analysis of Brownfield Cleanup Alternatives (ABCA) as part of cleanup design for the Social Circle Cotton Mill (site). This ABCA outlines alternatives to cleanup options for the site. The information discussed in this ABCA is based off previous assessments performed by Terracon at the site. Social Circle, GA is the administrator and cooperative agreement recipient of the United States Environmental Protection Agency (EPA) Brownfields Assessment Cooperative Agreement identified as BF-02D29922-0.

Please do not hesitate to contact us if you have any questions regarding this ABCA.

Sincerely,
Terracon Consultants, Inc.

Nicole Lustgarten
Senior Staff Scientist

Chris Bartley
Regional Services Specialist

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1.0 EXECUTIVE SUMMARY

This Analysis of Brownfields Cleanup Alternatives (ABCA) was prepared as part of the Downtown Development Authority of Social Circle (DDASC) Environmental Protection Agency (EPA) Community-wide Assessment Grant in general accordance with the scope of services outlined in the Terracon Consultants, Inc. (Terracon) Proposal No. PES237025 and Agreement for Services dated February 20, 2023.

Based on the findings of the Phase I Assessment completed December 12, 2023, the Asbestos and Lead Paint Inspection completed September 10, 2024, the Phase II Assessment completed February 14, 2025 and the supplemental assessment completed on December 3, 2025, Terracon identified impacts to the surface/subsurface soils and groundwater, as well as the presence of lead paint and asbestos in the structures onsite. In addition, a subsurface abnormality indicating the likely presence of an UST of unknown contents and solid waste/debris scattered across the site were documented.

Surface soil, subsurface soil, and groundwater in one or more samples across the site, predominately in the former footprint of the mill and downgradient of adjoining rail operations and warehouses, showed detections of RCRA metals and/or SVOCs in exceedance of applicable HSRA GC/NCs, Type 1 RRS, and/or Type 3 RRS. The RCRA metals and SVOC detections, which are in exceedance of HSRA NCs and/or GC, require release reporting to the Georgia EPD.

The site is being evaluated for mixed residential and commercial reuse. To meet or evaluate residential and commercial cleanup standards (Type 1 RRS and Type 3 RRS) the following delineation was performed:

- Type 3 exceedances of RCRA metals in groundwater on-site have been horizontally delineated to within site boundaries.
- The historical and recent detection of bis(2-ethylhexyl)phthalate in groundwater on the southern portion of the site is likely a laboratory artifact and not site derived. Therefore, Type 3 RRS exceedances of SVOCs in groundwater on-site have been delineated.
- Type 1 and Type 3 RRS exceedances of RCRA metals and PAHs in soils on-site have been sufficiently delineated.

Based on the assessments conducted at the site and their findings and/or conclusions, Terracon identified the following hazardous and non-hazardous materials at the property that this ABCA will consider:

- Asbestos containing materials identified in structures at the site.
- Lead paint identified in structures at the site.

- Lead detected in exceedance of Type 1 RRS and Type 3 RRS in groundwater samples collected from the northeastern and central portions of the site.
- Arsenic was detected in exceedance of Type 1 RRS and Type 3 RRS in the surface soil sample collected north and upgradient of the mill
- PAHs detected in exceedance of Type 1 RRS and Type 3 RRS in surface and subsurface soil samples collected from the footprint of the mill.
- An UST of unknown contents was identified onsite.
- Solid waste and debris from collapsed buildings and equipment left onsite is present across the property.

2.0 INTRODUCTION AND BACKGROUND

This Analysis of Brownfield Cleanup Alternatives (ABCA) is in support of an application for United States Environmental Protection Agency (EPA) Brownfield Cleanup Grant funding to address hazardous substances at the Social Circle Cotton Mill site located at 148 Cannon Drive, Social Circle, Walton County, Georgia (PIN SC080152). The 3.84-acre site is currently developed with a vacant and partially-burned former cotton mill structure, associated storage buildings and warehouses, and a 60,000-gallon water tower. The site is in visual disrepair from fire damage and was overgrown with kudzu. The Downtown Development Authority of Social Circle and City of Social Circle have planned redevelopment of this property for mixed residential and commercial use; however, because of lack of funding availability, the City has not been able to redevelop the property.

This ABCA includes information on the effectiveness, the ability of the grantee to implement each alternative, the cost of each proposed cleanup alternative, an evaluation of how environmental resilience considerations might impact proposed cleanup alternatives, and an analysis of the reasonableness of the various cleanup alternatives considered, including the one chosen. This ABCA is intended as a brief preliminary document summarizing the larger and more detailed technical and financial evaluations performed in addressing each of these areas. This ABCA may be modified technically and financially or in more depth relative to each of these areas upon award of funding and in response to community interaction.

Cleanup alternatives were evaluated in accordance with EPA Region 4 protocols and general guidance required prior to implementation of a cleanup design using EPA Brownfields Grant funding. More specifically, this ABCA summarizes viable cleanup alternatives based on site-specific conditions, technical feasibility, resiliency to changing environmental conditions, and preliminary cost/benefit analyses. EPA guidance requires a minimum of two different alternatives plus a “No Action” option be considered in this document. Specific cleanup alternatives and associated recommendations are presented in the applicable sections of this report.

2.1 Background

Historical Information

The subject site was developed as the Social Circle Cotton Mill in 1901, which included a warehouse and a three story 60,000 square foot main mill building where weaving, bailing, carding, roving, spinning, spooling, and cleaning was completed during production of cotton and polyester sheets. In the 1930s, the mill became part of the Cannon Mills Company. Several additional mill-related structures were built through the 1950s. Mill operations ceased in the early 1980s, and in 1994, the main mill building was severely damaged in a fire. In 2021, the main mill caught fire for a second time and sustained further damage. The site has remained vacant and has become overgrown with kudzu since the 2021 fire.

A rail line adjoined the northern subject site boundary as early as 1896. A small office building was built between the rail line and main mill building by 1904. A spring-fed cistern shown with several pipes connecting it to buildings on the subject site was apparent along the northeastern subject site boundary in 1904. A storage building was built west of the office building by 1909. Existing residential structures surrounded the southern and western subject site boundaries as early as 1909. The storage and office buildings apparent north of the subject site were removed by the early 2000s.

Historical use interviews and prior report reviews indicate following the mills closure in 1982, the subject site was leased out for various business purposes over several years. In the 1990s, a polychlorinated biphenyl (PCB)-containing-oil spill occurred in the northeast corner of the subject site. Soil was removed; however, confirmation sampling was not conducted. In 2002, a Targeted Brownfields Assessment and Health Consultation determined that the surface soils site-wide are contaminated with arsenic, benzo(a)pyrene, and PCBs at concentrations that pose a risk to human health. In 2006, the United States Environmental Protection Division (USEPA) was involved in a time-critical removal of several thousand containers of mixed hazardous substances that were being improperly stored at the subject site. In 2007, a Phase I ESA conducted by WRS identified an unlabeled and unregistered aboveground storage tank (AST) on the southeast exterior of the main mill building. This AST was not observed during Terracon's 2023 reconnaissance, but it is possible that it was covered by kudzu or removed following the 2021 fire as the site owner did not know of its existence or removal.

The site is currently owned by Mill Preservation Group and is to be acquired by the DDASC. The DDASC intends to apply for enrollment in the State Brownfields Program upon acquisition.

2.2 Site Assessment Findings

Terracon performed the following assessments outlined in Table 1 below under the USEPA Brownfields Assessment Grant Cooperative Agreement No. BF-02D29922-0.

Table 1 – Assessments Performed

Type of Assessment	Date of Report	Agency Review
Phase I Environmental Site Assessment	December 12, 2023	USEPA Brownfields
Asbestos and Lead Paint Inspection	September 10, 2024	USEPA Brownfields
Phase II Assessment Report	February 14, 2025	USEPA Brownfields
Structural Assessment Report	April 1, 2025	NA
Phase I Environmental Site Assessment	October 31, 2025	USEPA Brownfields
Supplemental Phase II Assessment Report	December 3, 2025	USEPA Brownfields

2.2.1 Phase I Environmental Site Assessment

Terracon performed an Environmental Site Assessment (ESA) at the site documented in the December 12, 2023 Phase I ESA Report. The Phase I ESA identified the following Recognized Environmental Conditions (RECs)

- Some historical textile operations involved the use of chemicals that may have resulted in the presence of contamination. The most reported contamination associated with textile mills includes metals and polycyclic aromatic hydrocarbons (PAHs), which were detected along with PCBs across the site at concentrations which could potentially pose a human health risk. The historical textile mill operations are considered a REC in connection with the subject site.

- It was documented in a historical report that the 1994 fire was extinguished using water from the cistern; however, it would be common for a fire of such magnitude to be extinguished using firefighting foam (FFF). Most FFF up until the early 2000s contained per- and polyfluoroalkyl substances (PFAS and PFOS) which have since been deemed environmentally toxic and known carcinogens. The potential use of FFF on the subject site is considered a REC in connection with the subject site.

- The unregulated and improper storage of thousands of gallons of hazardous waste on the subject site that lead to an emergency removal conducted by the USEPA is considered a REC in connection with the subject site.

- The historical storage of an unknown product in an AST on-site is considered a REC.

- Based on the proximity of the historical railroad operations adjoining the subject site to the north, there is potential for residual railroad impacts on the subject site. Some historical railroad operations involved the use of chemicals that may have resulted in the presence of contamination. The most reported contamination along rail lines includes metals, pesticides (such as lead arsenate), and constituents of oil or fuel (petroleum products). These chemicals have been associated with normal railroad operations and are likely to be found anywhere along the line. The historical railroad operations are considered a REC in connection - with the subject site.

2.2.2 Asbestos and Lead Paint Inspection

Terracon documented the Asbestos and Lead Paint Inspections performed at the site in the September 10, 2024 Asbestos and Lead Paint Inspection Report. The report identified the following findings for the site.

Based on the results of laboratory analysis, the following materials were identified as ACM:

Main Mill

- **Asphaltic roofing** (10% chrysotile) located on the main mill building and as debris in the main room – approximately 5,500 square feet (SF).
- **Pipe gaskets** (70% chrysotile) located in the lower-level room on the north side of the building – eight gaskets were observed.
- **3-inch pipe insulation** (50% chrysotile & 30% amosite) with black wrap on the exterior of the building, near the lower-level room on the north side – approximately 16 linear feet (LF).
- **Window glazing compound** (5% chrysotile) located on the exterior of the windows in the building – approximately 7 windows were observed, estimated 294 LF of glazing compound.
- **3-inch pipe insulation** (10% amosite & 10% chrysotile) located in the lower-level room on the north side and by the ceiling in the adjoining room to the south – approximately 285 LF.
- **10-inch pipe insulation** (20% chrysotile & 10% amosite) located in the lower-level room on the north side – approximately 128 LF.
- **Pipe insulation debris** (10-20% amosite & 10-20% chrysotile) located on the floor in the lower-level room on the north side of the building – approximately 1,200 SF.
- **48-inch pipe insulation** (presumed) located on the overhead stack in the lower-level room on the north side of the building – approximately 14 LF.
- **3-inch hard joint insulation** (5% chrysotile) located in the lower-level room on the north side of the building – approximately 6 joints.
- **10-inch hard joint insulation** (20% amosite & 5% chrysotile) located in the lower-level room on the north side of the building – approximately 8 joints.

- **3-inch layered pipe insulation** (60% chrysotile) located in the lower mechanical room and crawlspaces – approximately 25 LF observed.

Main Mill Restroom

- **Window glazing compound** (3% chrysotile) located on the exterior of the windows in the building – approximately 6 windows were observed, estimated 72 LF of glazing compound.

Pole Shed

- ACM was not identified.

Power Station

- **Corrugated cementitious siding** (15% chrysotile) located on the sides of the cooling tower on the roof and as debris around the building and inside the building – approximately 2,500 SF.

Shed

- ACM was not identified.

Warehouse

- **3-inch pipe insulation** (presumed) located on two overhead pipes on the walkway on the east side of the building – approximately 24 LF.

Water Tower

- **Bituminous black sealant** (7% chrysotile) located at the base of the central riser – approximately 24 LF.
- **Silver paint** (5% chrysotile) located over the entire structure – approximately 10,600 SF.

Lead was reported to be present in detectable concentrations in all 31 paint samples collected at the subject property. Laboratory analysis reported lead concentrations greater than 0.5% by weight in the following samples:

Main Mill

- Red paint (2.7%) on main level wooden pole
- Yellow paint (8.2%) on main level wooden floor
- Red paint (1.2%) on main level wooden fire extinguisher panel
- Black paint (3.7%) on lower-level metal pole

- Yellow paint (17%) on exterior metal handrail
- Black paint (13%) under gray paint on lower-level wooden door

Main Mill Restroom

- Samples were <0.5%

Pole Shed

- Samples were <0.5%

Power Station

- Teal paint (2.7%) on 8-inch metal piping
- Green paint (7.9%) on 8-inch metal piping
- Red paint (2.7%) on the metal boiler
- Red paint (0.62%) on structural steel at the roof

Shed

- Samples were <0.5%

Warehouses

- Gray paint (1.7%) on ground level wooden doors
- Yellow paint (13%) on the metal walkway handrail
- Red paint (4.6%) on the wooden pole fire extinguisher striping

Water Tower

- Red paint (0.58%) on metal fire hydrants and post indicator valves
- Gray paint (3.1%) on the metal water tower

Based on the scope of services, limitations, and findings of the assessment, Terracon recommended the following:

- The identified asbestos-containing materials should be removed by a licensed asbestos abatement contractor prior to redevelopment activities that may disturb the ACM.
- Presumed ACM (48-inch pipe insulation in the Main Mill and 3-inch pipe insulation by the ceiling of the Warehouse walkway) should be treated as ACM until such time as bulk sampling and analysis refute their asbestos content.

- The building owner or operator is required to provide the State of Georgia with written notification of planned asbestos abatement at least 10 working days prior to the commencement of ACM abatement activities.

- The Georgia Environmental Protection Division (GEPD) classifies lead as a hazardous waste. Building debris from non-residential projects that is coated with lead-containing paint must be analyzed using the toxicity characteristic leaching procedure (TCLP) to determine the toxic characteristics for lead in the waste. The regulatory threshold to be considered a hazardous waste is "equal to or greater than 5 parts per million" (≥5 ppm).

If the waste is from painted components and does not exceed the regulatory threshold, it is not considered a hazardous waste and may be disposed of in either a permitted municipal solid waste (MSW) landfill or in a permitted construction and demolition (C&D) debris landfill. If the waste is composed of paint chips, dust, soil, and/or sludge and does not exceed the regulatory threshold, it is not considered a hazardous waste. However, the waste must be disposed of in a permitted MSW landfill with a liner and leachate collection system.

All 31 paint samples collected at the subject property were reported to contain detectable concentrations of lead and are consequently considered to be lead-containing paint. Therefore, Terracon recommends that all paint systems at the subject property be considered as lead-containing and proper worker protections should be in place for work on any painted components to comply with OSHA. Additionally, building debris from the property that is coated with paint should be analyzed using the TCLP to determine the toxic characteristics for lead in the waste to comply with GEPD disposal regulations.

2.2.3 Phase II Assessment Report

Terracon produced a Phase II Assessment Report for the property dated February 14, 2025. The Phase II Assessment was performed in response to the RECs identified in Terracon's Phase I ESA report. The Phase II Assessment consisted of a geophysical survey, multiple surface and subsurface soil sample collection and groundwater sampling. Based on the site investigation and analytical results from the Phase II Assessment, Terracon concluded the following.

- Lead was detected in exceedance of Type 1 RRS and Type 3 RRS in groundwater samples collected from the northeastern (TW-2) and central (TW-4) portions of the site.

- Bis(2-ethylhexyl)phthalate was detected in exceedance of Type 1 RRS and Type 3 RRS in the groundwater sample and duplicate groundwater sample collected from the southeastern portion of the site in TW-6. Bis(2-ethylhexylphthalate was historically detected in exceedance of Type 1 RRS and Type 3 RRS upgradient of TW-6 in the southwest portion of the site (2001 Targeted Brownfields Assessment (TBA)), however it was concluded in the TBA that the detection was likely a laboratory artifact and not site derived.

- One or more per- and polyfluoroalkyl substances (PFAS) were detected in exceedance of the USEPA tap water and/or MCLs RSLs in temporary monitoring wells on the eastern portion of the site adjoining the mill (TW-2) and central portion of the site downgradient and in the former footprint of the mill (TW-3 and TW-4).

- Arsenic was detected in exceedance of Type 1 and 3 RRS in the surface soil sample collected north and upgradient of the mill at SB-1. RCRA metals were not detected in exceedance of HSRA NCs, Type 1 RRS, or Type 3 RRS at any other surface or subsurface soil sample collected during this sampling event. Arsenic was historically detected at concentrations in exceedance of Type 1 RRS and Type 3 RRS in the area beneath the water tower on the western portion of the site (2001 TBA). The area beneath the water tower was inaccessible and not sampled during this sampling event.

- Various SVOCs were detected in exceedance of Type 1 RRS (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, ideno[1,2,3-cd]pyrene, and phenanthrene) and/or Type 3 RRS (benzo[a]anthracene, benzo[a]pyrene, and phenanthrene) in surface soils in the historical footprint and downgradient of the mill (SS-3, SS-4, SS-5, and SB-5). SVOCs were not detected in exceedance of HSRA NCs, Type 1RRS, or Type 3 RRS at any other surface soil sample location on-site during this sampling event. Similar SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, and ideno[1,2,3-cd]pyrene) were historically detected site-wide in exceedance of residential and industrial preliminary remedial goals (PRGs) which are generally within the same order of magnitude or one order of magnitude lower than respective HSRA NC's, Type 1 RRS, and Type 3 RRS.

- Various SVOCs were detected in exceedance of Type 1 RRS (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, and indeno[1,2,3-cd]pyrene) and Type 3 RRS (benzo[a]pyrene) in subsurface soils in the historical footprint of the mill (SS-5). SVOCs were not detected in exceedance of HSRA NCs, Type 1 RRS, or Type 3 RRS at any other subsurface soil sample location on-site.

- Perfluorooctanoic acid (PFOA) was detected in exceedance of USEPA RSL in subsurface soils collected in the historical footprint of the mill at SB-4-2 and SS-7-2.

Based on the findings of the Phase II ESA, Terracon recommended an additional site investigation to determine if a UST is still in place in the vicinity of the observed vent pipes and delineate HSRA NC and GC exceedances to Type 1 RRS to support site reuse plan development and preparation of an Analysis of Brownfield Cleanup Alternatives (ABCA).

Groundwater and subsurface soil in the historical footprint and down-gradient of the mill are impaired with PFAS. On July 8, 2024, USEPA designated two PFAS compounds, PFOA and PFOS, including their salts and structural isomers, as hazardous substances under CERCLA. At this time PFAS is not regulated by GA EPD, and no additional action is required to address PFAS concentrations detected on-site pursuant to HSRA 391-3-19.

2.2.4 Structural Assessment Report

Shear Structural completed a structural assessment as part of the reuse planning process. The inspection included an evaluation documenting signs of structural distress, damage due to corrosion or poor drainage and other problems potentially affecting the safety, durability, maintenance, or performance of the structures.

The inspection revealed that all buildings, with the exception of the power station and shed, were structurally unsound and unsafe for entry. Several examples of exposed and rusted reinforcements, severe disrepair, and partially collapsed structures were included in the assessments reasoning for the conclusion.

2.2.5 Phase I Environmental Site Assessment

Terracon completed a Phase I Environmental Site Assessment as part of the due diligence required for the Downtown Development Authority to acquire the mill. This assessment revealed the following recognized environmental conditions (RECs) in connection with the subject site:

- Some historical textile operations involved the use of chemicals that have resulted in the presence of contamination of semi-volatile organic compounds (SVOCs) which were detected across the site at concentrations which could potentially pose a human health risk. The historical textile mill operations and resultant contamination are considered RECs in connection with the subject site.
- The unregulated and improper storage of thousands of gallons of hazardous wastes on the subject site that lead to an emergency removal conducted by the USEPA is considered a REC in connection with the subject site.
- The historical storage of an unknown product in an AST on-site is considered a REC.
- The possible presence of an unregistered underground storage tank (UST) used for the historical storage of an unknown product along the southern exterior wall of the main mill structure is considered a REC.
- Some historical railroad operations involved the use of chemicals that have resulted in the presence of contamination of metals which were detected along the northern boundary of the site at concentrations which could potentially pose a human health risk. The historical railroad operations and resultant contamination are considered RECs in connection with the subject site.

2.2.6 Supplemental Phase II Environmental Site Assessment

Fifty soil borings designed to delineate exceedances in SB-1, SB-5, SS-3, SS-4, SS-5, SSA4, and SSB4 were advanced, and two temporary wells designated TW-7 and TW-8 were installed to delineate findings in the previous Phase II Environmental Site Assessment. Delineation results of the 2025 Phase II ESA showed the following:

- Lead in groundwater has been delineated to site boundaries. The temporary monitoring wells installed (TW-7 and TW-8) north and south of areas where lead was previously detected did not have detections of lead.

- Soils samples beneath the water tower were collected in approximate locations to reflect the historical EPA sample locations from the 2002 TBA where arsenic was detected in exceedance of regulatory limits. Metals were horizontally and vertically delineated at both locations beneath the water tower (SSA4 and SSB4) where arsenic was previously detected in exceedance regulatory limits. Southern delineation samples for SSB4 were unable to be collected due to proximity to a nearby structure. This location is still considered delineated.

- Soils in the vicinity of SB-1 were horizontally and vertically delineated to below HSRA NCs, Type 1 RRS, and Type 3 RRS. Secondary step out samples to the west were limited due to elevation changes and could not be extended beyond 10 feet. Concentrations of arsenic decreased in the western direction so it can be assumed that the edge of delineation follows a similar trend as nearby step out samples.

- Soils in the vicinity of SS-3 were horizontally and vertically delineated to below HSRA NCs, Type 1 RRS, and Type 3 RRS.

- Soils in the vicinity of SS-4 were horizontally and vertically delineated to below HSRA NCs, Type 1 RRS, and Type 3 RRS to the north and west. Step out samples to the east and south had exceedances that marginally exceeded applicable regulatory limits, however enough information has been gathered to accurately prepare an ABCA to analyze remediation options.

- Soils in the vicinity of SB-5 were horizontally and vertically delineated to below HSRA NCs, Type 1 RRS, and Type 3 RRS to the south. Delineation to the west was limited due to proximity to a building west of the sampling locations. Step out samples to the north and east had exceedances that marginally exceeded applicable regulatory limits, however enough information has been gathered to accurately prepare an ABCA to analyze remediation options.

- Soils in the vicinity of SS-5 were horizontally and vertically delineated to below HSRA NCs, Type 1 RRS, and Type 3 RRS to the north, south, and west. Subsurface samples were unable to be collected to the north, south, and west due to refusal at 1.5 ft bgs from a suspected building foundation. Step out samples to the east had exceedances that marginally exceeded applicable regulatory limits, however enough information has been gathered to accurately prepare an ABCA to analyze remediation options.

2.2.7 Site Assessment Findings Summary

Based on the assessments conducted at the site and their findings and/or conclusions, Terracon identified the following hazardous and/or non-hazardous materials at the property that this ABCA report will address.

- Asbestos containing materials identified in structures at the site.
- Lead paint identified in structures at the site.
- Lead detected in exceedance of Type 1 RRS and Type 3 RRS in groundwater samples collected from the northeastern and central portions of the site.
- Arsenic was detected in exceedance of Type 1 RRS and Type 3 RRS in the surface soil sample collected north and upgradient of the mill.
- PAHs detected in exceedance of Type 1 RRS and Type 3 RRS in surface and subsurface soil samples collected from the footprint of the mill.
- AST and UST of unknown contents identified onsite.
- Solid waste/debris from building collapse, previous structural fires, and dumping onsite.

3.0 PROJECT GOALS AND RE-USE PLAN

Social Circle plans for commercial and residential re-use of the site. The town received community feedback from residents, and the consensus is that the community would greatly benefit from the redevelopment of the property into a mixed-use space for apartment-style residences, parking, commercials spaces, and green spaces. Costs for addressing the identified environmental impacts at the property have previously prohibited redevelopment of the property. With the assistance of the EPA Brownfields Assessment Grant, the property was able to be assessed to identify impairments at the site.

4.0 CLEANUP STANDARDS AND APPLICABLE REGULATIONS

4.1 Cleanup Standards

The cleanup standards used in this project may vary depending on the remediation of certain media; however, overall cleanup standards will be sufficient to protect public health, safety, and welfare. Additionally, cleanup standards for his project will be met to comply with restricted site use standards applicable to mixed-use developments. Specific cleanup standards are outlined for each specific media addressed in this ABCA.

4.1.1 Asbestos Containing Material

The Georgia Environmental Protection Division enforces several Rules which govern Georgia's asbestos abatement, licensing and disposal industry. The Rules, in their entirety, can be found at epd.georgia.gov/rules-and-laws; however, select requirements are outlined below:

- Rules for Air Quality Control: Chapter 391-3-1 incorporates and adopts the National Emission Standards for Hazardous Air Pollutants (NESHAP), Asbestos Revision by reference; Final Rule; Effective November 20, 1990. The following excerpt provides the authority for regulating asbestos emission standards and work practices in Georgia:

  Rule 391-3-1-.02(9)(b)7 Emission Standard for Asbestos (Including Work Practices): 40 CFR Part 61 (NESHAP), Subpart M (asbestos), as amended July 20, 2004, is hereby incorporated and adopted by reference.

  Applicability: All owners and operators when buildings are public, commercial, industrial; two or more single family residences; a single family residence that is part of a public, commercial, or industrial project; or a multifamily structure with five or more units.

  Basic Requirements: Accredited Asbestos Inspectors must perform thorough inspections for friable and non-friable asbestos-containing materials (ACM); notify EPD and remove all ACM that is friable or will become friable that is found at or above the trigger quantities; wet, package, and label the ACM before removal and keep wet until at disposal site; generate Waste Shipment Record; and notify EPD prior to demolition.

- Rules for Asbestos Removal and Encapsulation: Chapter 391-3-14 delineates the requirements for licensing asbestos abatement contractors, fees for abatement projects, project supervisor training requirements, licensing reciprocity, exemptions and enforcement. The following summary provides the authority for regulating asbestos abatement work:

Applicability: All contractors removing or disturbing more than 10 square or 10 linear feet of friable ACM in any type of building or structure.

Basic Requirements: All project supervisors and workers must be trained in approved asbestos training courses; the contractor must have a Georgia Asbestos Contractor License; contractor must submit a completed Project Notification to EPD before removing or disturbing more than the trigger quantities of friable ACM and pay the associated fee; and before and during work must wet and keep wet any ACMs that are or will become friable.

<u>Rules for Solid Waste Management</u>: Chapter 391-3-4 defines asbestos-containing waste and requirements for collection and disposal. The following excerpts provide the authority for regulating *Asbestos-Containing Waste:*

Rule 391-3-4.-01(5) "Asbestos-Containing Waste"means any solid waste containing more than 1 percent, by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysotile, cummingtonite-grunerite, amosite, riebeckite, crocidolite, anthophyllite, tremolite, and actinolite, using the method specified in Appendix A, Subpart F, 40 CFR part 763, Section 1.

Rule 391-3-4-.04(8) Asbestos Containing Waste:

- Collection
    - Vehicles used for the transportation of containerized asbestos waste shall have an enclosed carrying compartment or utilize a covering sufficient to contain the transported waste, prevent damage to containers, and prevent release or spillage from the vehicle.
    - Vehicles used to reduce waste volume by compaction shall not be used.
    - Vacuum trucks used to transport waste slurry must be constructed and operated to ensure that liquids do not leak from the truck.
- Disposal
    - Asbestos containing waste is to be disposed of only in a permitted landfill or other facility authorized by the Division for acceptance of asbestos containing waste.

- Asbestos containing waste shall be sealed in leak-proof containers labeled with: "Caution - Contains Asbestos Fibers - Avoid Opening or Breaking Container - Breathing Asbestos is Hazardous to Your Health."
- Asbestos containing waste shall be disposed of in such a manner as not to destroy the integrity of the asbestos containing materials containers prior to the placement of cover material. This waste shall be completely covered immediately after deposition with a minimum of six (6) inches of non-asbestos material."

Applicability: All detached ACMs, both friable and non-friable, of any quantity from any type of building or structure. All owners and operators of the structures or land and those handling, transporting and disposing of the ACM.

Basic Requirements: All ACM must be collected, placed in leak-proof packaging, labeled, transported in an enclosed or tightly covered vehicle, and deposited in a landfill permitted to accept asbestos.

4.1.2 Lead Paint Materials

In Georgia, lead-Based Paint is defined as paint or other surface coatings, including varnish, shellac, stains, and enamels, that contain lead equal to or greater than 1.0 mg/cm2 or 0.5% by weight or 5,000 parts per million (ppm). Standards to identify dangerous levels of lead in paint, dust, and soils. Specific standards were adopted that define lead-based paint, lead-based paint hazards, and lead-contaminated dust and soils (Georgia Lead-Based Paint Hazard Management Rules, Chapter 391-3-24-.03).

Standards for certification of firms and individuals that conduct lead inspections, risk assessments, and abatement activities. These standards allow EPD to carefully review, certify, and regulate firms and individuals that wish to engage in lead-based paint activities. Training and test performance standards for individuals ensure that they are adequately prepared prior to beginning work. Georgia regulates the following lead disciplines: Lead Inspector, Lead Risk Assessor, Lead Project Designer, Lead Supervisor, and Lead Worker. Initial and refresher training for individuals are required from a Georgia approved training provider, including passing post-training exams. The certification program provides the framework of regulatory oversight (Georgia Lead-Based Paint Hazard Management Rules, Chapter 391-3-24-.05).

The Georgia Lead-Based Paint Hazard Management Rules, Chapter 391-3-24, are mandatory for specific lead-based paint activities in target housing and child-occupied facilities. However, other building owners can make any or all of them mandatory for their projects by placing the standards summarized above in their project specifications or scope of work. This voluntary use of the Rules for circumstances in which they are not mandatory can help control lead hazards, reduce legal liability, and protect the environment (Georgia Lead-Based Paint Hazard Management Rules, Chapters 391-3-24-.08, 391-3-24-.10, and

391-3-24-.11). Three other EPD Rules also may be applicable to lead-based paint and renovation projects in target housing, child-occupied facilities, or other buildings:

- Hazardous Site Response Inventory Rules that require certain actions when soils are found to contain more than 400 ppm lead.
- Solid Waste Rules that prohibit disposal at the project site and require disposal of waste containing lead in a permitted landfill
- Hazardous Waste Rules that allow residential waste to be exempted from hazardous waste determination, but require lead-contaminated waste from certain child-occupied facilities and other sources to be tested by Toxicity Characteristic Leaching Procedures (TCLP) to determine if it is hazardous waste

OSHA *Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in-construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon the method of removal and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present.
- Removal or encapsulation of materials containing lead.
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead.
- Installation of products containing lead.
- Lead contamination/emergency clean-up.
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed.
- Maintenance operations associated with construction activities described above.

The lead paint abatement for the project shall meet the cleanup standards of each building's proposed use and/or renovation upon completion.

4.1.3 Lead in Groundwater

The Georgia EPD specifies the criteria for groundwater contamination in Rule 391-3-19-.07.

Georgia's Hazardous Site Response Act (HSRA) Type 1 Residential Risk Reduction Standards (RRS) for lead in groundwater are derived using standardized exposure assumptions and risk levels for residential properties, as detailed in Rule 391-3-19-.07 of the Georgia Rules and Regulations. To determine the specific standard, calculations based on the U.S. EPA's Risk Assessment Guidance for Superfund (RAGS) Part B, which accounts for cancer and non-cancer risks from ingestion, dermal contact, and inhalation, are performed.

Georgia's Hazardous Site Response Act (HSRA) Type 3 Risk Reduction Standard (RRS) for lead (Pb) in groundwater is not explicitly stated as a single value but requires meeting the applicable criteria for a site under a non-residential scenario, according to Rule 391-3-19-.07. The specific Type 3 groundwater criteria are defined in Item 1 of Rule 391-3-19-.07(6)(c), which details standardized exposure assumptions for non-residential use, and the necessary corrective action to achieve these standards.

4.1.4 Arsenic in Soils

Georgia has no single standard for arsenic in soil for Type 1 RRS; instead, it requires a risk-based assessment, with Type 1 referring to residential properties and the calculation of a site-specific RRS value to determine compliance with the Hazardous Site Response Act (HSRA). You must use standardized exposure assumptions to calculate the Type 1 RRS for arsenic in soil, which is then documented in a Compliance Status Report submitted to the Georgia Environmental Protection Division (EPD) to demonstrate the site meets the residential risk level.

Georgia standards for arsenic in soil under the Hazardous Site Response Act (HSRA) Type 3 RRS (Risk Reduction Standards) require concentrations to be low enough to pose no significant risk to non-residential human receptors, often via a site-specific risk assessment, while also preventing groundwater contamination to the higher of Type 3 or 4 groundwater criteria. Specific Type 3 soil standards for arsenic are not publicly published but must be determined by a Georgia EPD-approved fate-and-transport model or laboratory tests, considering soil media, current use, and potential exposure pathways for non-residential scenarios.

4.1.5 PAHs in Soils

For soil at residential and commercial properties under the Georgia Hazardous Site Response Act (HSRA), soils shall not exceed Type 1 Risk Reduction Standards or Type 3 Risk Reduction Standards, whichever is lesser.

4.1.6 AST and UST of Unknown Contents

The Georgia UST Regulations require disposal of any contaminated materials and contents as appropriate per Georgia Hazardous and Solid Waste Rules pending a waste determination.

4.1.7 Solid Waste/Debris

Solid waste is to be appropriately profiled and disposed of at a regulated facility in accordance with Georgia Solid Waste Regulations.

4.2 Laws and Regulations Applicable to the Cleanup

Laws and regulations that are applicable to this cleanup may include the following.

- Federal Small Business Liability Relief and Brownfields Revitalization Act
- Federal Davis-Bacon Act
- OSHA *Lead Standard for Construction* (29 CFR 1926.62)
- Resource Conservation and Recovery Act
- CERCLA, 42 U.S.C. §§ 9601, et. seq.
- GAEPD Regulation 391-3-14 Asbestos Removal and Encapsulation Rule
- GAEPD Regulation 391-3-24 Lead Based Paint Hazard Management Rule
- EPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP)
- GAEPD Regulation 391-3-15 Georgia Underground Storage Tank Rule
- GAEPD Regulation 391-3-4 Rules for Solid Waste Management
- GAEPD Regulation 391-3-11 Georgia Hazardous Waste Management Act
- GAEPD Regulation 391-3-19 Georgia Hazardous Site Response Act

All appropriate permits and notifications (e.g. abatements, tank removals, disposal manifests, etc.) will be obtained prior to work commencing for each task.

4.3 Resiliency Considerations

To ensure that brownfield site cleanups remain effective, EPA requires that when grant recipients prepare an ABCA, or equivalent state Brownfield program document, the ABCA must consider "the resilience of the remedial options to address potential adverse impacts caused by extreme weather events and natural hazards (e.g., sea level rise, drought, increased frequency and intensity of flooding, etc.)." Because the possibility exists that Cleanup grant funds or Revolving Loan Funds may be utilized for cleanup actions at the site, the resilience of the remedial actions proposed for this site has been considered in this ABCA.

4.3.1 General Considerations

In considering remedy resiliency Terracon consulted the following resources as authoritative sources to identify observed and potential risk conditions and any existing resiliency or hazard mitigation planning.

- Climate Mapping for Resilience and Adaptation (CMRA)
- Resources on Data.gov
- Resilience Toolkit
- FEMA National Flood Hazard Layer
- NOAA Sea Level Rise Viewer
- NASA Sea Level Rise Scenario Tool
- National Risk Index
- USDA Wildfire Risk to Communities Tool
- National Integrated Heat Health Information System

4.3.2 Site-Specific Considerations

According to the Climate Mapping for Resilience and Adaptation tool, Walton County has risk factors including flooding, wildfire, drought, and extreme heat. As a detailed site-specific analysis of each of these factors is not part of the scope for this ABCA, these risk factors will be considered collectively as "extreme weather" and discussed for each proposed cleanup alternative for the site below. The impacts of these risk factors are also considered in the discussion of the long-term use of the site. The Former Cotton Mill site does not have any additional or specific risk factors (e.g. located in a floodplain) that warrant consideration beyond what is listed above.

5.0 EVALUATION OF CLEANUP ALTERNATIVES

EPA guidance requires the ABCA, at a minimum, to consider two different cleanup remedies and a "no action" alternative. An evaluation of alternatives for each of the below listed cleanup tasks is provided in this ABCA.

- Asbestos containing materials identified in structures at the site.
- Lead paint identified in structures at the site.

- Lead detected in exceedance of Type 1 RRS and Type 3 RRS in groundwater samples collected from the northeastern and central portions of the site.
- Arsenic was detected in exceedance of Type 1 RRS and Type 3 RRS in the surface soil sample collected north and upgradient of the mill.
- Various PAHs detected in exceedance of Type 1 RRS and Type 3 RRS in surface and subsurface soil samples collected from the footprint of the mill
- An AST with unknown contents was identified on the southeast exterior of the mill and a potential UST with unknown contents were identified at the site to the south of the mill.
- Solid waste and debris were identified throughout the site primarily located in and around collapsed and burned structures on the central and east side of the site.
- PFAS/PFOA was identified in exceedance of the USEPA RSL in two soil samples located within the footprint of the mill. However, Georgia EPD does not regulate PFAS/PFOA so analysis of cleanup alternatives for this contaminant will not be evaluated.

To address hazardous substances at the site, three different alternatives were considered (minimum two different alternatives plus a "No Action" option) for each cleanup task. These alternatives are outlined in the sections that follow. Each subsection presents one of the following alternatives in greater detail, including discussion on adverse impact from potential extreme weather events, cost estimates for each alternative, and discussions on effectiveness and implementability for each alternative.

Table 2: Summary of Cleanup Alternatives

Cleanup Alternative	Description
A	Removal / Abatement
B	Engineering Control / Institutional Control
C	No Action

5.1 Asbestos Containing Materials

5.1.1 Alternative A: Removal/Abatement

Alternative A includes the abatement of all asbestos containing materials from the structures at the site. The abatement will be performed by a Georgia Licensed abatement contractor. This alternative would also include applicable air monitoring required during the abatement and disposal of asbestos containing material in accordance with state regulation 391-3-14: Asbestos Removal and Encapsulation Rule.

This alternative would meet the projects goals of commercial and residential use for the structures and allow for renovation once the asbestos containing material is abated.

Effectiveness – Including Impact from Potential Extreme Weather Event

Abatement of asbestos containing materials from the structures at the site serves as an effective measure for achieving the project goals of renovating structures at the site. Abatement removes the hazard of potentially exposing people to asbestos in future use of the site.

With the asbestos containing materials removed from the structures, damages to the structures caused by potential extreme weather events will not unnecessarily expose people to asbestos.

Implementability

This alternative is readily implementable and is a mature remedy common in the industry. A labor force readily exists in the area to accomplish this alternative. The buildings will need to be shored in certain cases for safe entry by a certified contractor using a design constructed by a professional engineer. Due to this, the implementation period is longer and estimated timeframe is approximately eight months to a year from start to finish.

Cost

Based upon Terracon's experience with consulting abatement contractors on similar projects, estimated costs for asbestos abatement activities, air monitoring analysis, shoring, structural engineering, required reporting, and professional environmental consulting services is approximately $175,000.

5.1.2 Alternative B: Encapsulation/Enclosure as an Engineering Control

Alternative B includes encapsulating and/or enclosing the asbestos containing materials identified in the structures at the site. Asbestos containing materials may be encapsulated utilizing sealants that bind the asbestos fibers together. Enclosure of asbestos containing materials can be achieved by placing something over the material that contains asbestos.

This alternative would not meet the project goals of commercial and residential use for the site. Leaving asbestos containing material in the structures at the site would place significant use restrictions against the site and its structures.

Effectiveness – Including Impact from Potential Extreme Weather Event

Encapsulation and/or enclosure of asbestos containing material is not an effective measure for site redevelopment. Continued maintenance and inspection of encapsulation and/or enclosure engineering controls would need to be regularly monitored for damage and/or effectiveness. According to the Guidelines for the Use of Encapsulants on Asbestos-Containing Materials report published by the EPA Office of Toxic Substances dated February 23, 1981, encapsulation is not advisable on friable materials. Additionally, abatement may be required when structures need remodeling or renovations where impacting asbestos containing materials is unavoidable.

Damage to the structures caused by potential extreme weather events may expose people to asbestos hazards should damages effect the structural integrity of the encapsulation and/or enclosure controls.

Implementability

This alternative is not readily implementable and the recommended management of asbestos containing materials in structures is abatement. However, encapsulation is often a quicker remedy than abatement of asbestos containing materials. The buildings will need to be shored for safe entry by a certified contractor using a design constructed by a professional engineer. Due to this, the estimated timeframe is approximately five to eight months from start to finish.

Cost

Based upon the amount of asbestos containing material identified in the structures at the site, estimated costs for encapsulation and/or enclosure of asbestos containing material in the structures is approximately $850,000. It should be noted that continued additional maintenance costs for inspections, upkeep, and recoating of encapsulating materials would be necessary for this alternative.

5.1.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address the asbestos containing material in the structures at the site. Structural components including asbestos containing materials would continue to degrade, increasing the risk of asbestos being released into the atmosphere. The structures and the site would remain a health and safety risk to the members of the community.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

Damages to the structures caused by potential extreme weather events may expose people to asbestos should damages effect asbestos containing materials. This alternative does not address potential current and future risks to human health and the environment.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Further, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to asbestos containing material remaining onsite. There would be no additional direct costs associated with alternative.

5.2 Lead Paint

5.2.1 Alternative A: Removal/Abatement

Alternative A includes the removal/abatement of lead paint materials from the structures at the site. This alternative includes removal/abatement of all lead containing paint based on the findings of the Asbestos & Lead Paint Inspection Report for the Social Circle Cotton Mill dated September 10, 2024. The abatement and disposal will be performed in accordance with GAEPD Regulation 391-3-24.

This alternative would meet the project goal of commercial use for the structures and allow for renovation options once the lead paint material is abated.

Effectiveness – Including Impact from Potential Extreme Weather Event

Abatement of lead paint material from the structures on the site serves as an effective measure for achieving the project goals of unrestricted commercial and residential use and potential renovation of structures at the site. Abatement removes the hazards of potentially exposing people to lead paint material in future use of the site structures.

With the lead paint material removed from the structures, damages to the structures caused by potential extreme weather events would not unnecessarily expose people to lead paint hazards.

Implementability

This alternative is readily implementable and is a mature remedy common in the industry. A labor force readily exists in the area to accomplish this alternative. The buildings will need to be shored for safe entry by a certified contractor using a design constructed by a professional engineer. Due to this, the implementation period is longer and estimated timeframe is approximately five to eight months from start to finish.

Cost

Based upon Terracon's experience consulting with abatement contractors on similar projects, estimated costs for lead paint abatement activities, air monitoring analysis, shoring, structural engineering, required reporting, and professional environmental consulting services is approximately $175,000.

5.2.2 Alternative B: Encapsulation/Enclosure as an Engineering Control

Alternative B includes encapsulation and/or enclosure of lead paint materials identified in the structures at the site. Encapsulation/enclosure of lead paint materials can be achieved by painting over the existing lead paint materials identified at the site.

This alternative would not meet the project goals of commercial and residential use for the site. Leaving lead paint material in the structures at the site would place significant use restrictions on renovating the structures at the property.

Effectiveness – Including Impact from Potential Extreme Weather Event

While encapsulation of lead paint surfaces by painting over the material with sealants is effective in theory, multiple variables contribute to the method's actual effectiveness. Encapsulation of lead paint by painting over with a sealant is only effective when the lead paint is in good condition. If the lead paint material is damaged and/or beginning to chip and/or peel, encapsulation is not an effective measure. Most of the lead paint identified in the structures during Terracon's lead paint assessment is in poor condition and/or chipping and peeling.

Additionally, encapsulation is only a temporary fix. Continued maintenance and inspection of encapsulation and/or enclosure engineering controls would require regular monitoring for damages and/or effectiveness. Abatement of lead paint material may be required when structures need remodeling or renovations where the impact of lead paint material is unavoidable.

Damages to the structures caused by potential extreme weather events may expose people to lead paint should damages affect the structural integrity of the encapsulation and/or enclosure controls.

Implementability

This alternative is readily implementable, but it is not recommended for management of lead paint in commercial structures. However, encapsulation is often a quicker remedy than abatement of lead paint materials. The buildings will need to be shored for safe entry by a certified contractor using a design constructed by a professional engineer. The estimated timeframe is approximately five to eight months from start to finish.

Cost

Based upon the observed poor condition of the lead paint materials in the structures at the site, encapsulation is deemed not to be an effective alternative option.

Estimated costs for encapsulation and/or enclosure of lead paint materials in the structures at the site is approximately $600,000 - $700,000. It should be noted that continued maintenance costs for regular inspections and management of encapsulating materials would be necessary for this alternative.

5.2.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address lead paint material in the structures at the site. Structural components including lead paint materials would continue to degrade, increasing the risk of lead exposure. The structures and the site would remain a health and safety risk to the members of the community and continue to be a barrier to redevelopment.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

Damage to the structures caused by potential extreme weather events may expose people to lead hazards should damages occur to the structures at the site. This alternative does not address potential current and future risks to human health and the environment.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Further, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to lead paint material remaining onsite. There would be no additional direct costs associated with this alternative.

5.3 Lead in Groundwater

5.3.1 Alternative A: Removal via Insitu Groundwater Treatment

Alternative A includes the treatment of lead in groundwater at the site. In-situ groundwater remediation methods for lead include chemical precipitation and in-situ bioremediation. Chemical methods involve injecting amendments like fly ash to immobilize the lead, while bioremediation uses microorganisms to break down the contaminant. Pump-and-treat, while not strictly in-situ, is a common alternative where contaminated water is extracted and treated above ground.

This alternative would meet the project goal of commercial and residential use of the site.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is effective; efficacy based on alternative selected – PRBs, in situ chemical stabilization, electrokinetic remediation (EKR), nanoremediation, bio and phyo-remediation, - varying degrees of cost, time to remove/stabilize, variables based on soil types, etc.

Due to depth to groundwater on-site typically ranging between 10 feet and 20 feet, damages to the site caused by potential extreme weather events would not likely expose people to groundwater.

Implementability

This alternative is readily implementable and is a less frequent remedy in the industry. A labor force readily exists in the area to accomplish this alternative. The implementation period is six months to two years including multiple injections followed by efficacy monitoring periods.

Cost

Based upon Terracon's experience with consulting abatement contractors with similar projects, estimated costs for mercury abatement activities, hazardous disposal, air monitoring analysis, required reporting, and professional environmental consulting services are approximately $300,000 - $500,000.

5.3.2 Alternative B: Deed Restriction as an Institutional Control

Alternative B includes implementing a deed restriction to prevent the use of groundwater at the site.

This alternative would meet the project goals of unrestricted commercial and residential use for the site except for utilizing the groundwater onsite for drinking water. However, the property is connected to the city water system and will provide the planned residences and commercial spaces with potable drinking water. Green spaces planned for the site redevelopment will also access city water for irrigation.

Effectiveness – Including Impact from Potential Extreme Weather Event

Restricting the use of groundwater at the site is an effective measure for site redevelopment, and it is a recommended industry practice to prevent exposure to contaminated groundwater that is not moving offsite.

Due to depth to groundwater on-site typically ranging between 10 feet and 20 feet, damages to the site caused by potential extreme weather events would not likely expose people to groundwater.

Implementability

This alternative is readily implementable and a widely recommended method for management of contaminated groundwater that is not moving offsite and does not pose a vapor risk to on-site structures. Receipt of a deed restriction for the local County Clerk is expected to take between 4 to 6 weeks.

Cost

Based upon Terracon's experience with deed restrictions with similar projects, estimated costs for required reporting and temporary well installation as part of the State Brownfield Program and professional environmental and/or legal consulting services are approximately $7,500.

5.3.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address the lead-contaminated groundwater at the site. The groundwater would remain a health and safety risk to the members of the community should they be exposed to it or consume it.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

Without restrictions on the groundwater, this alternative could allow exposure to impacted groundwater through groundwater withdrawal and does not address potential current and future risks to human health and the environment.

Due to depth to groundwater on-site typically ranging between 10 feet and 20 feet, damages to the site caused by potential extreme weather events would not likely expose people to groundwater.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Furthermore, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to possible exposure to groundwater on the site. There would be no additional direct costs associated with alternative.

5.4 Soil Contamination

5.4.1 Alternative A: Removal

Alternative A includes the removal of the arsenic- and PAH-contaminated soil on the northern and central portion of the site.

This alternative would meet the project goal of commercial and residential use by removing potential sources of arsenic impacts on the site.

Effectiveness – Including Impact from Potential Extreme Weather Event

Removal of the contaminated soils from the site serves as an effective measure for achieving the project goals of unrestricted commercial and residential use. This alternative will remove the potential for future contaminant impacts at the site.

Human exposure to the contaminated soils caused by potential extreme weather events would be eliminated by the removal of the soils from the site.

Implementability

This alternative is readily implementable and is a mature remedy common in the industry. A labor force readily exists in the area to accomplish this alternative. The implementation period is short term. The estimated timeframe is approximately 1-2 months from start to finish.

Cost

Based upon Terracon's experience with soil removal on similar projects, estimated costs for soil removal, disposal, imported backfill material, required reporting, and professional environmental consulting services is approximately $1,000,000.

5.4.2 Alternative B: Encapsulation/Enclosure as an Engineering Control

Alternative B includes encapsulating and/or enclosing the contaminated soils. The encapsulation method could include paving over the area of contaminated soil for use as a parking lot, outdoor seating area, or something of similar use. This would eliminate the possibility of human exposure to the contaminated soil as well as limit the ability of surface water to infiltrate and cause the contaminants to move into the groundwater. The contaminated soil would remain at the site.

This alternative would achieve the project goal of unrestricted commercial and residential use for the site.

Effectiveness – Including Impact from Potential Extreme Weather Event

Encapsulation and/or enclosure of the contaminated soil at the site is an effective measure for the reuse plans for the site and limiting human exposure to the soils. However, this alternative could restrict the use of these areas on-site and possibly require additional mitigation if a building were constructed above them (such as use of a vapor mitigation system). Additionally, due to the reuse of existing structures on-site, impacted soil would still need to be removed in order to place a cap and maintain current site elevation. Continued maintenance and inspection of encapsulation and/or enclosure of soil would require regular monitoring for damages and/or evidence or leaking and/or releases.

Damages to the cap (pavement) are unlikely to occur if potential extreme weather events take place at the site. However, overtime shifts in ground surface, freezing temperatures, or other events could cause cracking in the pavement and require immediate attention.

Implementability

This alternative is readily implementable, and the current redevelopment plans for the site include pavement covering the containing soils. However, planning is still in early stages and capping the contaminated soils would limit use of certain areas on-site. The use of pavement in the form of a parking lot is a common method for contaminated soil encapsulation.

The estimated timeframe of the encapsulation could be completed in approximately 4-5 months and would need intermediate vegetation until pavements could be installed during redevelopment.

Cost

The estimated costs for encapsulation/enclosure of the arsenic impacted soil, required reporting and approval from the EPD, and installation of the parking lot/garage is approximately $3,000,000 to $5,000,000.

5.4.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address the arsenic identified in the soils. The soil would remain at the site and continue to be a potential source of additional hazardous material impacts. Under this alternative, the site would remain a health and safety risk to the members of the community.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

The soils exceed residential and commercial use standards and without proper remediation pose a risk to site users. Extreme weather events such as heavy rains may cause excessive erosion which could carry contaminated soils off-site and pose a risk to off-site users.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Furthermore, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to the arsenic remaining onsite. There would be no additional direct costs associated with alternative.

5.5 AST and UST

5.5.1 Alternative A: Remove/Abandon

Alternative A includes the removal and/or abandonment of the AST and UST and their unknown contents that were identified at the site. This alternative will allow for these potentially hazardous materials to be properly disposed of in accordance with state and federal regulations.

This alternative would meet the project goal of unrestricted commercial and residential use for the site allow for potential redevelopment options once the AST and UST are removed/abandoned.

Effectiveness – Including Impact from Potential Extreme Weather Event

Removal of the AST and UST and their unknown contents from the site serves as an effective measure for achieving the project goal for commercial and residential use of the site. Abandonment would remove the hazards, some of which are unknown, of potentially exposing people to waste material in future use of the site.

With the removal of the AST and UST and their contents, damages to the structures caused by potential extreme weather events will not unnecessarily expose people to these potential hazards.

Implementability

This alternative is readily implementable and is a mature remedy common in the industry. The UST requires additional investigation using ground penetrating radar (GPR) to determine if it exists. Further, excavation around this suspected UST would require structural considerations due to proximity to a load bearing wall. A labor force readily exists in the area to accomplish this alternative. The implementation period is short term due to

Terracon's previous assessments of the structures at the site. The estimated timeframe is approximately 1 week from start to finish.

Cost

Based upon Terracon's experience with removal of ASTs and USTs on similar projects, estimated costs for removal/abatement activities, required reporting, structural engineering, and professional environmental consulting services is approximately $50,000.

5.5.2 Alternative B: Encapsulation/Enclosure as an Engineering Control

Alternative B includes encapsulating and/or enclosing an abandoned in place method for abandoning the ASTs and UST at the site. Abandoning in place of USTs usually involves filling the tank interior with cement and/or foam material after removal of fuel and/or contents from inside the tank and cleaning of the tanks has taken place. Fuel lines associated with the tanks would either need to be removed or filled in place.

This alternative would not meet the project goals of unrestricted commercial and residential use for the site. Materials associated with the AST, UST and their unknown contents remaining at the site would place significant use restrictions against renovations or redevelopment of the site.

Effectiveness – Including Impact from Potential Extreme Weather Event

Encapsulation and/or enclosure through the abandoning in place of the ASTs and UST at the site is an effective measure for tank closure. However, this alternative of tank closure would result in site use restrictions in the areas where the tanks remain. Additionally, the tanks remaining at the site do not align with the future site reuse plans. This alternative may later result in redevelopment complications, delays, and increased redevelopment costs due to the ASTs and UST remaining onsite.

Damages to the ASTs may occur if potential extreme weather events take place at the site.

The tanks remaining at the site increase the probability of damages occurring to the tanks in the case of extreme weather events.

Implementability

This alternative is not a recommended management of ASTs and USTs. The estimated timeframe is long term because this remedy would require the continued monitoring of the tanks for evidence or releases and/or spills. Additionally, the UST requires additional investigation using ground penetrating radar (GPR) to determine if it exists. Further, excavation around this suspected UST would require structural considerations due to proximity to a load bearing wall.

Cost

The estimated costs for encapsulation and/or enclosure of an AST and UST is approximately $42,500. It should be noted that continued maintenance costs for inspection of encapsulated tanks materials would be necessary for this alternative.

5.5.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address the AST and UST at the site. The tanks and their contents would continue to degrade, increasing the risk of exposure to humans and organisms. The tanks and their unknown contents at the site would remain a health and safety risk to the members of the community.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

Damage to the tanks caused by potential extreme weather events may expose people to hazardous materials. This alternative does not address potential current and future risks to human health and the environment.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Further, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to tanks remaining at the site. There would be no additional direct costs associated with alternative.

5.6 Solid Waste/Debris

5.6.1 Alternative A: Removal

Alternative A includes the removal and/or abatement of solid waste and debris that is scattered across the site. This alternative will allow for these materials (i.e. solid waste) to be properly disposed of in accordance with state and federal regulations.

This alternative would meet the project goal of unrestricted commercial and residential use for the site and structures and allow for potential renovation options once the solid waste and debris is removed/abated.

Effectiveness – Including Impact from Potential Extreme Weather Event

Removal/abatement of solid waste and debris on the site serves as an effective measure for achieving the project goal for the potential renovation of the site and its structures. Abatement removes the hazard of potentially exposing people to solid waste in future use of the site.

With the solid waste and debris removed from across the site, damages to these materials caused by potential extreme weather events will not unnecessarily expose people to these potential hazards.

Implementability

This alternative is readily implementable and is a mature remedy common in the industry. A labor force readily exists in the area to accomplish this alternative. The implementation period is short term due to Terracon's previous assessments of the debris at the site. The estimated timeframe is approximately 2-3 months from start to finish.

Cost

Based upon Terracon's experience with removal of solid and hazardous waste on similar projects, estimated costs for removal/abatement activities, waste determinations, required reporting, and professional environmental consulting services is approximately $1,020,000.

5.6.2 Alternative B: Encapsulation/Enclosure as an Engineering Control

Alternative B includes encapsulating and/or enclosing the solid waste/debris materials identified at the site. This would be achieved through stockpiling the waste material in a designated area at the site.

This alternative would not meet the project goals of unrestricted commercial and residential use for the site. Solid waste materials remaining at the site would place significant use restrictions against renovations or redevelopment of the site.

Effectiveness – Including Impact from Potential Extreme Weather Event

Encapsulation and/or enclosure of solid waste material is not an effective measure for site redevelopment. Continued maintenance and inspection of encapsulation and/or enclosure of waste material would require regular monitoring for damages and/or evidence or leaking and/or releases. Solid waste should be managed in accordance with EPA regulations for accumulation limits and disposal recommendations.

Damage to the site caused by potential extreme weather events may expose people to solid waste and hazardous substances should damage affect the areas in which the solid waste/debris is contained.

Implementability

This alternative is not recommended management for solid waste at a site. The estimated timeframe is long term because this remedy would require the continued monitoring of solid waste for evidence or releases and/or spills.

Cost

The estimated costs for encapsulation and/or enclosure of solid waste material at the site including materials, labor, and transportation is approximately $3,000,000 to $5,000,000. It should be noted that continued maintenance costs for inspection of encapsulated solid waste materials would be necessary for this alternative, as well as special requirements for buildings such as inclusion of a VMS.

5.6.3 Alternative C: No Action

The "no action" scenario is required by the EPA ABCA process. No action would be taken to address the solid waste/debris at the site. The waste would continue to degrade, increasing the risk of exposure to humans and organisms. The waste and the site would remain a health and safety risk to the members of the community.

Effectiveness – Including Impact from Potential Extreme Weather Event

This alternative is deemed ineffective for brownfield redevelopment.

Damage to the waste and debris caused by potential extreme weather events may expose people to hazardous materials. This alternative does not address potential current and future risks to human health and the environment.

Implementability

By its definition, taking no action precludes a discussion of implementation.

Cost

By its definition, taking no action precludes a discussion of cost to implement. Further, this alternative may later result in redevelopment complications, delays and increased redevelopment costs due to solid waste remaining at the site. There would be no additional direct costs associated with alternative.

6.0 RECOMMENDED CLEANUP ALTERNATIVE

The impacts to the site requiring cleanup are listed below, followed by the recommended approach for each cleanup task:

- Asbestos containing materials identified in structures at the site.

- Lead paint identified in structures at the site.
- Lead detected in exceedance of Type 1 RRS and Type 3 RRS in groundwater samples collected from the northeastern and central portions of the site.
- Arsenic detected in exceedance of Type 1 RRS and Type 3 RRS in the surface soil sample collected north and upgradient of the mill.
- PAHs detected in exceedance of Type 1 RRS and Type 3 RRS in surface and subsurface soil samples collected from the footprint of the mill.
- An AST with unknown contents was identified on the southeast exterior of the mill and a potential UST with unknown contents was identified at the site to the south of the mill.
- Solid waste and debris were identified throughout the site primarily located in and around collapsed and burned structures on the central and eastern portions of the site.
- PFAS/PFOA was identified in exceedance of the USEPA RSL in two soil samples located within the footprint of the mill. However, Georgia EPD does not regulate PFAS/PFOA so analysis of cleanup alternatives for this contaminant will not be evaluated.

Table 3 – Summary of Recommended Alternatives

Task	Cost of Alternative
Asbestos Containing Material - Removal/Abatement	$175,000
Lead Paint - Removal/Abatement	$175,000
Lead in Groundwater - Institutional Control/Deed Restriction	$7,500
Contaminated Soils – Removal/Abatement	$1,000,000
AST and UST - Removal/Encapsulation	$42,500
Solid Waste/Debris - Removal/Abatement	$1,020,000
TOTAL	**$2,420,000**

6.1 Asbestos Containing Materials

The recommended cleanup approach for the identified asbestos containing material in the structures at the site is Alternative A: Removal/Abatement. This alternative would address human health risks using a proven approach consistent with recognized industry standards. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment of the structures at the site. This option remains comparably cost-effective under most remediation scenarios and is more sustainable when considering resiliency. This option to remove the asbestos containing material from the structures at the site eliminates the hazards to human health and the environment.

6.2 Lead Paint

The recommended cleanup approach for the identified lead paint material in the structures at the site is Alternative A: Removal/Abatement. This alternative would address human health risks using a proven approach consistent with recognized industry standards. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment of the structures at the site. This option remains comparably cost-effective under most remediation scenarios and is more sustainable when considering resiliency. This option to remove the lead paint material from the structures at the site eliminates the hazards to human health and the environment.

6.3 Lead in Groundwater

The recommended cleanup approach for the identified lead in groundwater at the site is Alternative B: Institutional Control/Deed Restriction. This alternative would address human health risks using a proven approach consistent with recognized industry standards for limiting human exposure to contaminated groundwater. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment of the structure at the site. This option remains comparably cost-effective under most remediation scenarios, is sustainable when considering resiliency, and reduces the potential impact to human health and the environment.

6.4 Contaminants in Soils

The recommended cleanup approach for the identified contamination in soil at the site is Alternative A: Removal/Abatement. This alternative would address human health risks using a proven approach consistent with recognized industry standards for limiting human exposure to contaminated soils. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment of the structures at the site. This option remains comparably cost-effective under most remediation scenarios, is sustainable when considering resiliency, and reduces the potential impact to human health and the environment.

6.5 AST and UST

The recommended cleanup approach for the AST at the site is Alternative A: Removal/Abatement. This alternative would address human health risks using a proven approach consistent with recognized industry standards. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment at the site. This option remains comparably cost-effective under most remediation scenarios and is sustainable when considering resiliency. This option to remove the AST from the site eliminates the potential impact to human health and the environment.

The recommended cleanup approach for the UST at the site is Alternative C: Encapsulation. The alternative would address human health risks using a proven approach consistent with recognized industry standards. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment at the site. This alternative also prevents disturbance of the load bearing wall. This option remains comparably cost-effective under most remediation scenarios and is sustainable when considering resiliency. This option to remove the AST from the site eliminates the potential impact to human health and the environment.

6.6 Solid Waste and Debris

The recommended cleanup approach for the identified solid waste material and other debris at the site is Alternative A: Removal/Abatement. This alternative would address human health risks using a proven approach consistent with recognized industry standards. Additionally, this alternative aligns with the future reuse plans allowing for future redevelopment of the structures at the site. This option remains comparably cost-effective under most remediation scenarios and is sustainable when considering resiliency. This option to remove the solid waste material and debris from the site eliminates the hazards to human health and the environment.

7.0 GREEN AND SUSTAINABLE REMEDIATION MEASURES

To make the selected alternative greener, or more sustainable, several techniques are planned. The most recent Best Management Practices (BMPs) issued under ASTM Standard E-2893: Standard Guide for Greener Cleanups will be used as a reference in this effort. The DDA will require the cleanup contractor to follow an idle-reduction policy and use heavy equipment with advanced emissions controls operated on ultra-low sulfur diesel. The number of mobilizations to the Site will be minimized and BMPs will be utilized to prevent migration of hazardous materials from the site to the environment. In addition, the City plans to ask bidding cleanup contractors to propose additional green remediation techniques in their response to the Request for Proposals for the cleanup contract.

Preserving the historical significance of the Mill is central to the site’s redevelopment. The primary mill structure, along with its warehouses and water tower, will be repurposed to supporting future use. Further, salvageable building materials, such as bricks and concrete, from buildings that will be taken down will be recycled for use on-site as able. This approach not only reduces landfill waste and greenhouse gas emissions but also creates opportunities to integrate renewable energy and energy-efficient strategies throughout the renovation.

1. PROJECT AREA DESCRIPTION AND PLANS FOR REVITALIZATION

Target Area and Brownfields a. Overview of Brownfield Challenges and Description of Target Area: The City of Social Circle (City) (population 5,113) is located in north-central Georgia, approximately 50 miles to the east of Atlanta in Walton County.[1] Social Circle was incorporated as a village in 1832, and in 1845 the Georgia Railroad's westward advance created the county's first rail hub in Social Circle. Social Circle was incorporated as a town in 1869 and designated as a city in 1904. Industry flourished when the Social Circle Cotton Mill (the Mill) opened in 1901 and was the cornerstone of manufacturing and economic growth. The Mill was the southern anchor of the downtown area for nearly 80 years. During its peak operation, the mill employed 225 workers and produced large cotton sheets. The adjacent mill village, consisting of approximately 30 single-family and duplex dwellings, is a historical neighborhood developed in the 1910s to house mill workers. Mill operations ceased in the early 1980s and in 1994 the mill was severely damaged by a fire which led to job loss, decades of economic decline and legacy ***brownfield challenges*** within the City.

The geographic boundary and target area for this cleanup project is the city limits of Social Circle. The Mill closure coupled with the Great Recession in 2007 resulted in abandoned businesses and buildings left to decay which caused long-term negative economic and environmental impacts on the sensitive populations (youth 27%) residing in the City.[1] With the closure of the Mill in the early 1980s and the economic issues that resulted, the City created the Downtown Development Authority (DDA) of Social Circle in 1984 to address the revitalization and redevelopment needs within the City to promote trade, commerce, industry, and public welfare. The DDA, City, and other community groups are working together to restore the target area by attracting new businesses to create an environment for economic success. The EPA FY22 Brownfield Assessment Grant award has made it possible for the DDA to assess many sites within the city limits, including the Mill. With Cleanup funding from the EPA the planned redevelopment of the Mill will be realized, bringing vibrancy, new jobs and affordable housing to the community. b. Description of the Proposed Brownfield Site(s): The cleanup site for this grant application is the 3.84-acre property called the **Social Circle Cotton Mill (the Mill) which has been vacant for over 15 years**. The site was developed as a textile mill in 1901 and included a warehouse and a three story 60,000 square foot main mill building where weaving, bailing, carding, roving, spinning, spooling, and cleaning was completed during production of cotton and polyester sheets. Several additional mill-related structures were constructed through the 1950s. Today, the remaining structures include the main mill building, warehouses, storage sheds, a water tower, and a cooling and power station building. Mill operations ceased in the early 1980s and in 1994 over half of the primary mill building was destroyed by a fire. Following the Mill's closure the site was leased for various business purposes, most notably for the storage of several thousand containers of mixed hazardous substances procured from the Department of Defense. In 2021, the primary mill caught fire for a second time and sustained further damage. The remnants of the fire damaged buildings remain on site. The other site structures are also in various states of disrepair with broken windows, collapsed roofs, water intrusion, mold, rotted timbers, peeling paint, and overgrown vegetation. Leftover mill equipment and piles of burnt building debris are scattered throughout the site. To properly assess this site, the DDA utilized a local "sheepscaping" business to clear invasive vines from an otherwise inaccessible priority site. During the sheep's stay, the local high school future farmers of America (FFA) club was engaged to feed, water, and name the sheep; the project was an overwhelmingly successful community outreach tool for the FY22 Assessment Grant.

[1] US Census 2019-2023 American Community Survey

Redevelopment of the site has been hindered by contamination from historical mill operations. A Phase II Environmental Site Assessment (ESA) completed during the FY22 Assessment Grant confirmed on-site arsenic concentrations are as high as 188 milligrams per kilogram (mg/kg) in soil (Georgia Residential Type 1 Risk Reduction Standard is 20 mg/kg). Polycyclic aromatic hydrocarbon (PAH) chemicals, such as benzo(a)pyrene, are also present at concentrations more than 40 times the residential risk reduction standard. Further, asbestos and lead based paint have been identified in various building material in the Mill, warehouses, power station, and water tower.

Revitalization of the Target Area c. Reuse Strategy and Alignment with Revitalization Plans: The City updated their Comprehensive Plan in 2017 (amended February 18, 2020) to outline current objectives and goals established for addressing the needs of the community. The residents were directly involved in the update of the Plan and made it clear what they envisioned the reuse at the Mill site to be, a place for living, gathering, and working. As part of the Comprehensive Plan, the City envisions the historic downtown with the **redevelopment at the Mill** as the heart of the community with wide sidewalks, a public square, greenspace, shops, restaurants, office spaces, and a variety of affordable housing options. DDA and City leadership recognize that the remediation and redevelopment of the Mill is vital to the success of the Comprehensive Plan. ***The DDA has a local developer ready to redevelop the cleanup site.*** The DDA has used the FY22 Assessment grant award to complete eligible planning activities such as a Site Reuse Assessment with architectural renderings of the site and a structural assessment to determine the final planned redevelopment of the site. **The Mill** will be redeveloped into **mixed-use commercial and residential units**, **including an adjacent large green space with springs (located at the Walton and Spring Property Priority Sites from the FY22 Grant Application**) to provide pleasing water features and native landscaping in the shadow of downtown. Sidewalks and multi-use recreation trails will allow for connectivity throughout the target area. Redevelopment will create jobs, encourage the reopening of storefronts within the downtown, create commercial opportunities for residents, and fulfill the demand for housing while increasing the desirability of downtown living while fulfilling the current City and DDA revitalization plans. This cleanup site is not located in a federally designated flood plain.

d. Outcomes and Benefits of Reuse Strategy: ***The DDA has a local developer ready to redevelop the Mill*** into mixed-use residential and commercial units with a large green space which **will provide both economic and non-economic benefits** to the sensitive populations living in the target area. Redevelopment of the Mill will improve property values within the downtown; support locally owned businesses; enable new dining, shopping, and lifestyle experiences; provide higher quality affordable housing opportunities; catalyze economic growth; create new jobs; attract new residents and businesses to the downtown; and create an ongoing source of funding for an expandable list of projects within the area. Further, the rebuilding of dilapidated structures will prevent risk of exposure to unsafe materials during extreme weather events or natural disasters, improving local resilience. The redevelopment into mixed-use residential and commercial units with a large green space will also eliminate public hazards and the eyesore of derelict and overgrown vacant buildings. Existing contamination on the cleanup site will be remediated to levels that are protective of human health and the environment.

Preserving the historical significance of the Mill is central to the site's redevelopment. The primary mill structure, along with its warehouses and water tower, will be repurposed to honor the past while supporting future use. Further, salvageable building materials, such as bricks and concrete, from buildings that will be taken down will be recycled for use on-site. This approach not only reduces landfill waste and greenhouse gas emissions but also creates opportunities to integrate **renewable energy and energy-efficient strategies** throughout the renovation. Cleanup and renovation efforts will prioritize **energy-efficient field equipment** wherever possible, while the redeveloped buildings—both restored and newly constructed—will feature efficient lighting, appliances, and windows. The cleanup contractor will follow idle-reduction policies, and the number of mobilizations will be minimized. In addition, the adjacent greenspace will play a vital role in stormwater design and management, **strengthening local resilience against extreme weather events and natural disasters**.

Strategy for Leveraging Resources e. Resources Needed for Site Characterization: The DDA has an open FY22 Assessment Brownfield Grant that was used to fund site characterization. The site is considered fully characterized and does not require additional investigation prior to beginning cleanup activities. The Georgia Environmental Protection Division (GEPD) has funding available for site investigation and cleanup costs incurred while a participant is enrolled in the state Brownfield Program; these costs can be recouped through the abatement of property taxes for up to 10 years. Since the site is fully delineated, these funds will be sufficient to complete any necessary additional site characterization.

f. Resources Needed for Site Remediation: The entire remediation of the project will be funded by this EPA Brownfield Cleanup Grant application in the amount of $4,000,000. If additional funding is needed for remediation, the DDA can access funding through the GEPD Brownfield Program mentioned above.

g. Resources Needed for Site Reuse: The redevelopment of the site will commence upon completion of this EPA Brownfield Cleanup grant. Local developer, Madison Development Co, LLC, has committed to the full redevelopment of the Mill site. The City government has committed to upgrades of the infrastructure as needed at the site which will be paid through their general fund. **See attached commitment letters.**

Additional grant funding opportunities that will be pursued to assist in the redevelopment costs of the Mill will be the Georgia Department of Transportation - Transportation Alternative Program grant to provide funding for non-traditional transportation projects such as sidewalks, bike paths, and streetscapes (up to $1,000,000) and the Georgia Department of Community Affairs Community Development Block Grant to fund demolition of blight, housing, public facilities, and economic development for low-and moderate-income persons (up to $500,000). The City also has a special-purpose local-option sales tax (SPLOST), which is an optional 1% sales tax levied by the City for funding the construction of public facilities.

h. Use of Existing Infrastructure: The DDA intends to repurpose existing buildings at the site, including the primary mill, warehouses, water tower, and power station building. The site has access to existing water, sewer, and electric infrastructure. Additional funding needed for the installation of other utilities, such as internet and gas, and roadways will be funded through various City programs including the General Fund and the Water & Sewer Fund.

2. COMMUNITY NEED AND COMMUNITY ENGAGEMENT

Community Need a. The Community's Need for Funding: **The population of the City of Social Circle is small with only 5,113** residents who suffer from **low income** as indicated by the **per capita income of $30,763,** which is below the national ($43,289) average.[2] The percentage of **all families living below the poverty level with children under the age of 5 is 56% within the City**, significantly higher than the national (12%) average.[2]

[2] US Census: 2019–2023 American Community Survey

The City's operations budget is limited due to the small, low-income population and is composed of only five major funds: the General Fund (37%), the Water & Sewer Fund (25%), the Gas Fund (26%), the Solid Waste Fund (2%), and the Special Purpose Local Option Sales Tax (SPLOST) Fund (10%).[3] The General Fund primarily consists of Public Safety services (46%), Public Works (20%), and City Council, Administration, Financial services, and Community Development (34%).[3] **The DDA Program accounts for 2% of general fund expenditures and depends heavily on volunteers and private funds to support downtown improvements and events.** The City's economy has been significantly impacted by both the loss of the textile industry in the 1980s followed by the Great Recession, and the COVID pandemic. Property tax values have shown a flat trend over the past 10 years. Currently, General Fund expenditures are exceeding revenues, and the gap in funding is being supported by transfers from other funds. Raising taxes or fees to fund additional projects is not feasible in the current state of the local economy. The City needs financial assistance to remediate the Mill and the funding assistance from an EPA Brownfield Cleanup Grant will pave the way for redevelopment and restoration and create much needed jobs and increase revenue for residents.

b. Health or Welfare of Sensitive Populations: The City's **sensitive populations include the youth and the impoverished**. Families with children under the age of 5 living in poverty make up 56% of the population (US 12%).[4] The youth make up 27% of the population (US 22%).[4] **Another vulnerable population is the Black residents, which constitute 35% of the city population**, far greater than the national average (12%).[4]

The City has faced significant economic and social welfare challenges stemming from the decline of textile manufacturing, the Great Recession, the COVID-19 pandemic, and persistently low levels of educational attainment. These factors have contributed to long-term unemployment among residents, which currently stands at 10%, double the national average of 5%.[4] Only 12% of residents hold a bachelor's degree or higher, compared to 21% nationally.[4] The resulting poverty, compounded by a lack of community cohesion and the presence of unmanaged, vacant properties, has led to increased crime rates. Blighted, overgrown lots throughout the area not only invite illegal activity but also make residents feel unsafe in their own neighborhoods. The likelihood of experiencing violent crime in the city is 1 in 178, significantly higher than the state average of 1 in 284.[5] The chance of becoming a victim of either violent or property crime in Social Circle is 1 in 51.[5] Social Circle has a crime rate that is higher than 70% of Georgia's cities and towns of all sizes.[5]

Redevelopment of the Mill into a mixed-use space presents a transformative opportunity. It will generate new employment options and introduce affordable housing, which is critically needed given the area's median home value of $244,400, below the national average of $303,400.[4] Revitalizing this blighted site will help reduce crime, foster a stronger sense of community, and encourage residents to engage more fully with local amenities such as downtown businesses, parks, churches, and workplaces. Remediating environmental contaminants will pave the way for broader revitalization, creating jobs and expanding access to safe, affordable housing, empowering vulnerable populations to break the cycle of poverty.

c. Greater Than Normal Incidence of Disease and Adverse Health Conditions: The hazardous substances on the **Mill site** are a cause for concern, especially when potential contaminants could affect the health of the sensitive populations in the target area (city level data not available). **Cancer remains the second leading cause of death in Georgia**, accounting for one out of every

[3] City of Social Circle Program of Services Adopted Budget (July 1, 2025–June 30, 2026)
[4] US Census 2019-2023 American Community Survey
[5] Neighborhood Scout Crime – Social Circle, GA

five deaths. In 2023, approximately 18,435 Georgians died of cancer. According to the Georgia Comprehensive Cancer Registry, the age-adjusted cancer incidence rate for Non-Hispanic Black males in Walton County is 657.5 per 100,000, which significantly exceeds the statewide rate for Non-Hispanic Black males at 591.6 per 100,000. Additionally, Walton County's overall cancer incidence rates for males (567.9 per 100,000) and females (412.5 per 100,000) are higher than the state averages of 543.9 per 100,000 for males and 410.7 per 100,000 for females.[6] This is especially troubling as contaminants at the cleanup site are known carcinogens, including PAHs and heavy metals.

Lead paint and asbestos exposure associated with aging mill structures also pose increased health risks to the residents. **The City ranks in the 74th percentile in the state for lead paint indicators.**[7] According to the Centers for Disease Control (CDC), children six years and younger are the most susceptible to the effects of lead, which include **birth defects**, reduced IQ, developmental problems, and behavioral problems. Each year, approximately 4,000 babies are **born with a birth defect,** making birth defects the leading cause of infant death statewide—accounting for 1 in 6 infant deaths (county and city level data not available – US 3%).[8] In terms of **infant mortality, Georgia's statewide rate was 7.2 deaths per 1,000 live births** (US 5.6 per 1,000)**,** with significant racial disparities: Black, non-Hispanic infants experienced a mortality rate of 12.2 per 1,000 (US 10.9), more than double that of White, non-Hispanic infants at 5.4 per 1,000 (US 4.5).[8] Over half of these deaths occurred within the first six days of life, underscoring the need for targeted maternal and infant health interventions in communities like Walton County.[8]

Asbestos exposure increases the risk of developing lung disease (asbestosis) and cancer (mesothelioma). **The City ranks in the 98th percentile in the state for Toxic Releases to Air**.[7] High levels of toxins in the air are associated with lung disease (including **asthma**), heart disease, and premature death. Between 2018 and 2020, the adult asthma prevalence rate in Georgia was approximately 8.9% (US 8%), with significantly higher rates among females (11.6% - US 10%), individuals with less than a high school education (13.2% - US N/A), and those with annual household incomes below $15,000 (15.3% - US 14.8%).[9] Among children aged 0–17, the asthma prevalence rate was 9.1% (US 5.8%), with non-Hispanic Black children experiencing a notably higher rate of 14.5% (US 10%), compared to 3.4% among non-Hispanic White children (US 5%).[9] Children from families earning less than $25,000 annually had an asthma prevalence of 12.8% (US 11%), more than double the rate of children from families earning over $75,000 (5.9% - US4%).[9] While Walton County-specific data is not publicly available, it is part of Georgia's District 10, where asthma surveillance is ongoing. Exposure to particulate matter continues to be associated with increased symptoms of respiratory distress, reduced lung function, and increased use of asthma medications, particularly among sensitive populations. PAHs are common contaminants found in the soil and groundwater at textile mill sites. These vapor forming chemicals have the potential to migrate and accumulate into overlying buildings, which can cause both acute and chronic health issues for sensitive populations of the target area, especially the residents living in the mill village adjacent to the cleanup site. Remediating the Mill with EPA Brownfield funding will reduce exposure to contaminants such as heavy metals, PAHs, lead paint, asbestos, and particulate matter, while mitigating vapor intrusion risks. These improvements will help lower rates of cancer, lung disease, and other health issues among sensitive populations in the City.

[6] Georgia Department of Public Health (DPH) – Cancer Reports - https://dph.georgia.gov/cancer-reports
[7] https://pedp-ejscreen.azurewebsites.net/
[8] Georgia DPH – Infant Mortality - https://dph.georgia.gov/infant-mortality
[9] Georgia DPH – Asthma https://dph.georgia.gov/Asthma

d. Economically Impoverished/Disproportionately Impacted Populations: The proposed cleanup of the Mill site will directly reduce environmental threats that have long affected vulnerable and economically disadvantaged residents in Social Circle. Decades of industrial vacancy have left the property with potential contamination, unsafe structures, and blighted conditions that disproportionately impact nearby households with limited resources to avoid or mitigate environmental hazards. EPA Cleanup funding is essential to addressing these risks by enabling the removal or containment of contaminants, stabilization of deteriorated building materials, and implementation of measures that prevent further exposure to hazardous substances. The cleanup will lay the foundation for a safe and sustainable reuse of the property by supporting material abatement, waste reduction, and the integration of energy-efficient and renewable-energy systems in future redevelopment phases. These actions will reduce greenhouse gas emissions, improve local air quality, and eliminate environmental conditions that have historically burdened marginalized populations. Planned greenspace and modern stormwater controls will further reduce flooding risks and strengthen resilience for residents most affected by extreme weather events. By remediating a long-neglected industrial site and preparing it for community-serving uses, the project will mitigate longstanding environmental inequities while creating opportunities for economic revitalization, public amenities, and future affordable housing that benefit those who have borne the greatest impacts of industrial decline.

Community Engagement e. Project Involvement & f. Project Roles The community organizations described below have expressed interest in being a project partner to assist in the process of outreach and education, and cleanup and redevelopment planning at the Mill site.

Name of Organization & Mission	Point of Contact	Specific involvement in the project
Main Street Commission: Local organization focused on the preservation, promotion and growth of the Downtown.	Amber McKibben amckibben@socialcirclega.gov	**Assistance/Decision Making:** reuse planning and grant applications.
Social Circle United Methodist Church: Make disciples of Jesus Christ for the transformation of the world.	Reverend Janet Balasko janet.balasko@ngumc.net	**Assistance/Decision Making:** community outreach via meeting location and dissemination of information to residents.
Social Circle Historic Preservation Society: Local, volunteer grassroots organization that preserves community heritage through education and conservation of city historic resources.	Tim Haney thaney@axisrisk.com	**Assistance/Decision Making:** cleanup and reuse planning.
Social Circle Development Authority: Created to promote and assist with economic and industrial development in the City.	Hal Dally, Chair hal.w.dally@gmail.com	**Assistance/Decision Making**: funding through grant opportunities for site redevelopment.

g. Incorporating Community Input: The DDA recognizes the importance of informing and gathering public input when making changes within a community. Target-area residents and local organizations are a knowledgeable resource and will be able to help with site identification and information disbursal. The DDA developed a Community Involvement Plan (CIP) during the FY22 Assessment Grant to describe planned community engagement activities, scheduling, project background, and key players. The CIP will be updated for this Cleanup Grant award and available for review and comment at City Hall, the City website, and on social media.

On January 12, 2026, the DDA held a public meeting for this cleanup grant application that was open to the public. Future grant outreach public meetings (both in person and online) will also be conducted throughout the duration of this grant to solicit input from and share information with target-area residents, project partners, and stakeholders on project progress, successes, and challenges. The DDA will use the input and information gathered from community meetings and project partner meetings to inform the DDA's Brownfield Program oversight and decisions. Comments received from the community will be reviewed during quarterly brownfield project team meetings and responses will be issued during the next community meeting.

The DDA realizes using multiple forms of media for communication is vital to success. The DDA will continue to distribute grant-related information through multiple social media platforms, including Facebook, Instagram, and Twitter. The City's website will have a dedicated Brownfield Program section with up-to-date information on the cleanup project and community meetings. Grant information and updates will also be included in the "Around the Well" newsletter that is distributed monthly to all City utility customers. The DDA will continue to conduct virtual meetings (an alternative to in person meetings) and has recently moved to larger facilities to accommodate public attendance at meetings (for those with limited access to the internet). A brochure explaining the cleanup project will be shared throughout the community and strategically posted at City offices, recreational facilities, and the drive-through window at City Hall. DDA will also announce updates during recorded City Council meetings available through YouTube and Facebook.

3. TASK DESCRIPTIONS, COST ESTIMATES, AND MEASURING PROGRESS

a. Proposed Cleanup Plan: The structures onsite require asbestos and lead-based paint remediation so that they can be reused. A Georgia licensed abatement contractor will be acquired to complete asbestos and lead based paint abatement and disposal. Air monitoring and abatement activities will be completed in accordance with state regulations, including the requirement to shore the buildings for safe entry. Groundwater at the site is impacted by lead. Groundwater impacts have been delineated to the site boundaries and will be remediated through use of a deed restriction, preventing the withdrawal and/or use of groundwater from the site. Solid waste throughout the site will be removed and disposed of at an appropriately regulated facility to allow for redevelopment of the open spaces on-site. The storage tanks on-site will be removed, tested, and disposed of in accordance with Georgia UST Management Program and 40 CFR Part 280.71. Similarly, the UST removal will require structural assessment by a licensed Georgia engineer and shoring of the load bearing wall in the direct vicinity of the tank. Arsenic and PAH-impacted soils on-site will be excavated, profiled, and disposed of at an appropriately regulated facility. Confirmation sampling performed by a qualified environmental professional will take place during both the tank and soil removals to ensure that all impacted material is removed. Removal of impacted soils will allow for the proposed redevelopment and minimize exposure risks to future site occupants.

Description of Tasks/Activities and Outputs

Task 1: Programmatic Support	
b.	*Project Implementation:* ***EPA Non-Funded:*** Using its own funding, the DDA will procure a Qualified Environmental Professional (QEP) to assist with the Brownfield (BF) Grant project. The DDA's BF Project Finance Director will oversee grant implementation and administration to ensure compliance with the EPA Cooperative Agreement work plan, schedule, and terms and conditions. ***EPA Funded:*** The QEP will assist in completing ACRES database reporting, yearly financial reporting, quarterly reporting and additional

	programmatic support for the four-year term of the grant. The travel budget allows for two staff to attend three BF training conferences/workshops.
c.	*Anticipated Project Schedule:* Procure QEP in Q1. ACRES & quarterly reporting begins in Q1 and continues throughout the grant. Annual reporting and forms created in Q5, Q9, Q13, and final closeout.
d.	*Task/Activity Lead:* DDA: Susan Roper, City Clerk, BF Project Finance Director
e.	*Outputs:* ACRES database reporting, 4 annual financial reports, 16 quarterly reports, programmatic support for the four-year grant period. Two staff to attend three conferences.
Task 2: Outreach	
b.	*Project Implementation:* ***EPA Funded:*** Updated existing CIP, outreach materials, BF webpage, and social media posts will be developed by the DDA's BF Project Director with assistance from the QEP. DDA staff will lead the community/educational meetings discussing project plans and updates. Supplies: printing of outreach materials (brochures/handouts) and office supplies to manage the grant.
c.	*Anticipated Project Schedule:* Update existing CIP created in Q1. Community/educational meetings held Q2 Y1–4. BF webpage and outreach materials created in Q1 and posted throughout the grant project.
d.	*Task/Activity Lead:* DDA: Michael Owens, DDA Chairman, BF Project Director
e.	*Outputs:* update CIP, BF webpage, 4 community/educational meetings, brochures/handouts, social media posts, summary of community meetings in EPA-required quarterly reports.
Task 3: Cleanup Planning	
b.	*Project Implementation:* ***EPA Funded:*** The QEP will finalize the draft Analysis for Brownfield Cleanup Alternatives (ABCA), which include evaluating cleanup alternatives, calculating cleanup costs, and determining site-appropriate remediation and/or reuse planning to reduce health/environmental risks.
c.	*Anticipated Project Schedule:* Plans begin in Q4 and will continue throughout the grant.
d.	*Task/Activity Lead:* The QEP will implement the technical aspects of the project with oversight from the DDA: Michael Owens, DDA Chairman, BF Project Director.
e.	*Outputs:* 1 Final ABCA
Task 4: Cleanup & Oversight	
b.	*Project Implementation:* ***EPA Funded:*** The DDA will work with the QEP as they manage the site cleanup activities, perform confirmation sampling, contractor oversight, cleanup reporting, and final remedial action report. The DDA and QEP will work with a remediation contractor as they perform site cleanup activities, including contractor mobilization/demobilization and cleanup implementation.
c.	*Anticipated Project Schedule:* Oversight will follow Cleanup schedule. Final remedial action report 08/2030. Cleanup implementation 10/2026 – 08/2030.
d.	*Task/Activity Lead:* The QEP will conduct cleanup oversight of the project. The remediation contractor will implement cleanup activities with oversight from QEP and DDA: Michael Owens, DDA Chair, BF Program Director.
e.	*Outputs:* 2 final remedial action reports, 1 site ready for reuse, 1 job for oversight, and 57 jobs for cleanup activities.

f. Cost Estimates: Below are the anticipated cost estimates for this project *based on past brownfield projects as determined by local market standards with contractual hourly rates based on the skills needed for specific tasks*.

- The budget for this project includes travel, supplies, conference fees (Other), construction and contractual costs only.
- No administrative costs are included in the budget.

Task 1 Programmatic Support: Contractual: ACRES database reporting, yearly financial reporting, quarterly reporting $25,050 (167 hrs × $150). Travel: 2 staff to attend 3 conferences for a total of $9,900 (flights at $500, 3 nights in hotel at $250/night, incidentals and per diem at $100 per day × 4 days × 2 staff × 3 events). Other: $1,200 conference registration ($200 per event per person).

Task 2 Outreach: Contractual: Updated CIP $1,050 (7 hrs × $150); BF webpage, outreach brochure/handouts, social media posts $2,100 (14 hrs × $150); 4 community/educational meetings $6,000 ($1,500 per mtg.; 10 hours per meeting to include preparation and execution × $150); Supplies: $500 ($500 [500 printouts at $1 each]).

Task 3 Cleanup Planning: Contractual: 1 finalized ABCA **$1,920** (16 hrs x $120); 1 Cleanup QAPP **$5,200** (40 hrs x $130)

Task 4 Cleanup & Oversight: Contractual: Remediation oversight and reporting **$166,500** ($1,850/day x 90); Soil confirmation sample laboratory analysis **$5,070** (20 metal soil samples at $39/sample, 55 PAH soil samples at $78/sample). Construction: UST and AST removal **$42,500;** Soil and C&D debris removal **$2,020,000**: contractor mobilization, soil excavation, transport, and disposal of soil $750,000; contractor mobilization, C&D excavation, transport, and disposal of C&D material $1,270,000; sitewide asbestos and lead based paint abatement **$1,050,000**: structural engineer $10,000, shoring contractor **$1,353,010**, asbestos and lead paint abatement **$350,000**.

Category	**Tasks**				**Totals**
	Programmatic Support	*Outreach*	*Cleanup Planning*	*Cleanup & Oversight*	
Travel	$9,900				$9,900
Other	$1,200				$1,200
Supplies		$500			$500
Contractual	$25,050	$9,150	$7,120	$171,570	$212,890
Construction				$3,775,510	$3,775,510
Total Budget	**$36,150**	**$9,650**	**$7,120**	**$3,947,080**	**$4,000,000**

g. Plan to Measure and Evaluate Environmental Progress and Results: To ensure this EPA Brownfield Project is on schedule, the DDA's internal Brownfield Project Team, including the QEP, will meet quarterly to track project progress of outputs identified in 3.e. using an Excel spreadsheet in addition to submitting quarterly reports to the EPA. Project expenditures and activities will be monitored to ensure timely completion within the four-year timeframe. Site-specific information will be entered into the ACRES database. Key outputs to be tracked include QAPP; ABCA; cleanup plan development; contractor procurement; quarterly, annual, and closeout reports; and the number of community meetings. Key outcomes to be tracked include community participation, acres assessed, acres ready for reuse, leveraged redevelopment dollars, and jobs created. If project efficiency is inadequate, the DDA has countermeasures in place, including monthly calls with the EPA Project Officer and, if necessary, a Corrective Action Plan to get the project back on track.

4. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

Programmatic Capability a. Organizational Structure & b. Description of Key Staff: The Downtown Development Authority (DDA) has been charged with the task of meeting the revitalization and redevelopment needs of the central business district of the City of Social Circle to promote trade, commerce, industry, and public welfare. The Board is made up of local citizens, developers, and entrepreneurs, who are well versed in successful business ventures and are capable of seeing this Brownfield Cleanup Project through to completion. The Brownfield Project Team responsible for implementing the project will be made up of DDA Board Members. This same Brownfield Project Team has successfully managed the FY22 Assessment Grant project allowing for the assessment and planning of the Mill cleanup site. As the **Brownfield Project Director,** the Chairman of the DDA, Mr. Michael Owens, will be responsible for the day-to-day activities, timely and successful expenditure of funds, and completion of administrative and financial requirements of the project. He has served in this role for years during the successful FY22 Brownfield Assessment Grant. Mr. Owens has over 20 years of management experience in the private sector. As a DDA board member since 2012, he has been instrumental in working with various public and private entities to plan, fund, and complete multiple projects within the Downtown District. He will be assisted by Ms. Susan Roper, the City Clerk and DDA Secretary. She will serve as the **Financial Director** and will be responsible for managing the finances for this grant. She has over 30 years of experience in municipal government and has served as the City Clerk since 2005 and was recognized in 2013 as Finance Officer of the Year for Georgia by the Municipal Clerks and Finance Officers Association. She will be responsible for all financial grant management and ASAP.gov draw downs. A qualified environmental professional (QEP) will assist with the technical portions of the brownfield project.

c. Acquiring Additional Resources: The DDA will hire a qualified QEP to support the technical and reporting aspects of the Brownfield Cleanup Grant, adhering to EPA's Professional Service procurement process and local contracting requirements. Throughout the project, additional resources will be acquired as needed and will meet all procurement requirements.

Past Performance and Accomplishments d. Currently Has or Previously Received an EPA Brownfields Grant: (1) Accomplishments: The DDA was awarded an EPA Brownfield Assessment Grant in FY22 in the amount of $400,000. The DDA completed and implemented a Community Involvement Plan to educate and involve residents in the grant process. A prioritized site inventory was created and identified 44 potential sites, seven (7) Phase I ESAs have been completed in accordance with the ASTM All Appropriate Inquiry (AAI) requirements and three (3) initial Phase II assessments evaluating sediment, soil, indoor air, surface water, and groundwater have been completed. To facilitate assessments, DDA utilized a local "sheepscaping" business to introduce sheep to clear an invasive vining plant from an otherwise inaccessible Cotton Mill priority site. Reuse planning and structural assessments with a certified women and small business enterprise began in 2025 and an Analysis of Brownfield Cleanup Alternatives (ABCA) has been completed at the Mill cleanup site.

(2) Compliance with Grant Requirements: The DDA has been in full compliance with their open FY22 EPA Brownfield Assessment Grant. ACRES has been updated with all relevant grant information and outputs. All reporting has been turned into the EPA Project Officer in a timely manner. The FY22 grant opened on 10/01/2022 and is expected to close with all funds expended by March 2026 (official closeout date is 09/30/2026). As of December 1, 2025, 97% of the grant has been spent. The remaining $10,349 will be spent on applying for the Mill's enrollment in the State brownfield program, a community meeting and visioning session, and grant closeout reporting.