



The Chemours Company  
Fayetteville Works  
22828 NC Highway 87 W  
Fayetteville, NC 28306

# **SOIL AND MATERIAL WASTE MANAGEMENT PLAN**

## **Fayetteville Works – Non-Manufacturing Areas**

*Prepared by*

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July 3, 2020



## TABLE OF CONTENTS

1	INTRODUCTION .....	4
	1.1 Background.....	4
	1.2 Environmental Concerns.....	4
	1.3 Purpose of SMWMP .....	4
2	SOIL AND MATERIAL WASTE GENERATING ACTIVITIES.....	6
	2.1 Clearing Activities .....	6
	2.2 Soil Disturbance Activities .....	6
	2.3 Investigation Derived Waste (IDW).....	6
3	WASTE CHARACTERIZATION, PROFILING, DOCUMENTATION, TRANSPORTATION AND DISPOSAL .....	8
	3.1 Waste Characterization .....	8
	3.2 Waste Disposal Facility Profiling.....	8
	3.3 Transportation.....	8
	3.4 Disposal Facility Selection .....	8
4	DOCUMENTATION .....	10



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## **LIST OF FIGURES**

Figure 1: Facility Map

## **LIST OF APPENDICES**

Appendix A: SMWMP Contact List

## **ACRONYMS AND ABBREVIATIONS**

BMP – Best Management Practice

IDW – Investigation Derived Waste

NCDEQ – North Carolina Department of Environmental Quality

NPDES – National Pollutant Discharge Elimination System

NCDOT – North Carolina Department of Transportation

PFAS – per- and polyfluoroalkyl substances

QA/QC – Quality Assurance/Quality Control

SMWMP – Soil and Material Waste Management Plan

WWTP – Wastewater Treatment Plant

## **1 INTRODUCTION**

This Soil and Material Waste Management Plan (SMWMP) has been prepared for the Chemours Fayetteville Works Facility (the “Facility”) located at 22828 NC Highway 87 W in Fayetteville, North Carolina. This Plan is intended to assist in the management of soil and other material waste that is being generated during construction and remediation activities occurring outside the fenceline of the Fayetteville Works Manufacturing Area. Activities include restoration and remediation activities at the onsite groundwater seeps and the Old Outfall 002 among other potential locations. Figure 1 shows the general layout of the Facility and restoration activity areas.

### **1.1 Background**

Chemours is presently constructing a water treatment plant near the discharge location of Old Outfall 002 for remediation as stipulated under the Consent Order entered by the Superior Court for Bladen County on February 25, 2019 among Chemours, North Carolina Department of Environmental Quality (NCDEQ) and Cape Fear River Watch. The water treatment plant is scheduled to be operational in September 2020. The construction area is not within the footprint of the manufacturing areas at the facility (either active or closed), is located above the 100-year flood plain and outside of the Old Outfall 002 flow channel. The operation of the water treatment plant will be subject to a National Pollutant Discharge Elimination System (NPDES) permit to be issued by NCDEQ. In order to construct the water treatment plant, approximately 3 acres of land will need to be cleared and graded.

### **1.2 Environmental Concerns**

Based on the results of historical assessment, per- and polyfluoroalkyl substances (PFAS) may be present in soil and other material waste generated during construction and remediation activities at the Fayetteville Works facility. As a result, soil and material waste managed during activities at non-manufacturing areas will require the use of professional judgement in the profiling process and selection of appropriate disposal facilities prior to transportation and disposal. This plan will require periodic updating as the plan develops. Periodic updates will be provided to NCDEQ.

### **1.3 Purpose of SMWMP**

The purpose of this SMWMP is to provide procedures for managing soil and material waste during construction and remediation activities occurring outside the fenceline of the Fayetteville Works Manufacturing Area. The SMWMP is a working document that may be revised on an as-needed basis to support project objectives and may be amended by Chemours to accommodate changing site conditions and operating requirements. A copy of the SMWMP will be kept onsite for reference.



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Chemours is responsible for implementation of this SMWMP. Contractors hired to perform various activities will be responsible for defining specific work practices to manage soil and other materials during construction to meet the requirements of this SMWMP. Contractors will work with appropriate representatives of the Facility to further define roles and responsibilities associated with this SMWMP that will be recorded in the table presented in Appendix A.

## **2 SOIL AND MATERIAL WASTE GENERATING ACTIVITIES**

The following subsections summarize potential and or known construction/excavation scenarios that could be encountered during site activities. Appropriate Chemours representatives will communicate with NCDEQ prior to disposal of cleared materials.

### **2.1 Clearing Activities**

The areas outside of the manufacturing area at the facility may be wooded and overgrown. If so, clearing and grubbing will be required. Aboveground portions of felled trees (i.e., portions of trees that are not in contact with onsite soils) will be cut, processed, and moved to a location designated for beneficial reuse at an offsite mill. Limbs of the trees unsuitable for beneficial reuse will either be chipped for reuse onsite or sent to a lined sanitary landfill.

Grubbing activities include the removal of stumps and root matting during the land disturbance activity. Stumps and root matting will be chipped for reuse onsite or sent to a lined sanitary landfill.

### **2.2 Soil Disturbance and Stockpiling**

It is anticipated that cut/fill soil will be part of construction related activities and cut/fill soil will be managed onsite in areas outlined within the applicable Land Disturbance Permit. If excess soil is generated and needs to be taken off-site, Chemours will evaluate the potential for offsite disposal. Excess soils will be stockpiled and samples collected to characterize soil at a frequency necessary for the intended use of the data.

Stockpiling of excavated soil will be minimized and stockpiles will be removed as soon as practicable. While stockpiles are in place, they will be inspected daily, and before and after storm events. Best Management Practices (BMPs) for sediment and erosion control will be employed in accordance with Land Disturbance Permits associated with the individual projects that this SMWMP covers. Records of inspections will be documented in a field book maintained at the Site and be available for inspection.

Stockpile activities will be compliant with applicable laws and regulations. Stockpiles will be appropriately graded to control run-off and stockpile areas will be kept free of standing water. Stockpiles will be located a minimum of 100 feet from the Cape Fear River and property boundaries, to the extent possible. Additional silt fencing or hay bales may be used as needed near catch basins and other potential discharge points.

### **2.3 Investigation Derived Waste (IDW)**

Investigation Derived Waste (IDW) generated during soil and groundwater investigations will be containerized and characterization samples will be collected at a frequency necessary for the



intended use of the data and potential disposal. Groundwater IDW will be characterized and if it meets criteria will be containerized and transported to the OOF002 Wastewater Treatment Plant (WWTP) for treatment. Groundwater IDW that does not meet treatment criteria for the OOF002 WWTP will be sent for off-site disposal at an approved facility.

If large volumes of groundwater are generated during site investigation, e.g., pumping tests, then groundwater may be temporarily stored in frac tanks. The frac tank will be set within secondary containment to minimize potential for spills. Water will be transferred and processed through the OOF2 WWTP as appropriate.

Solid wastes that are free of pumpable liquid must be placed in “open-top” containment. Slurry type waste should be placed in the container and allowed to settle overnight to 24 hours. After settlement, the container should be re-opened and free liquid or water that has risen to the top should be pumped off or otherwise removed to minimize the chance of spillage while in transit. Containers of soil or slurry waste (not pumpable) should be filled only about two-thirds full.

Liquid wastes that are pumpable must be placed in “tight-head” or “closed-top” containers. Containers of liquid wastes should be filled only about 75% full due to weight limit of 600 pounds per container.

Container exteriors should be wiped clean of any waste soil, slurry, solids or liquid. Should 55-gallon containers be used onsite, the container exteriors should be in as pristine condition as possible thereby minimizing the appearance of spillage or a release during transit. Containers should be labeled with a “Non-Hazardous” (green) label. The label should contain a unique identifying number with “Chemours” as the “Shipper” and the contents of the container identified. If multiple waste streams are placed in a container (ex. 75% soil and 25% drilling mud or slurry), estimated percentages of each waste stream should be recorded (adding up to 100% of the total contents of the container).

Containers will be temporarily secured and stored in a designated staging area(s) while bulk pickups are coordinated. A log of each container, its contents, and the dates it was generated and transported off-site will be recorded in a field book and provided to the Chemours representative prior to container inspection.

### **3 WASTE CHARACTERIZATION, PROFILING, DOCUMENTATION, TRANSPORTATION AND DISPOSAL**

#### **3.1 Waste Characterization**

Waste characterization may be required by the receiving facility and in conformance with its permits and applicable laws. PFAS compounds are a class of emerging contaminants that have not been designated as a hazardous substance. In addition, laboratory methods and detection limit for PFAS compounds are frequently updated. As such, there are no defined PFAS screening values for solid or liquid waste to rely upon. Professional judgement in periodic consultation with NCDEQ will be used in the characterization sampling process in a manner required by the receiving facility and in conformance with its permits and applicable laws.

#### **3.2 Waste Disposal Facility Profiling**

Professional judgement in consultation with NCDEQ will be used in the profiling process and selection of appropriate disposal facilities prior to transportation and disposal.

Only designated facility representatives may sign waste profile and waste manifest documentation.

#### **3.3 Transportation**

Conveyances of soil and other material waste will be performed by licensed and permitted haulers in accordance with appropriate local, state and federal regulations. Loaded transport vehicles leaving the site will be appropriately lined, securely covered and/or cleaned in accordance with appropriate local, State and Federal requirements including North Carolina Department of Transportation (NCDOT) regulations. During loading, transport, unloading and disposal, it will be necessary to use a manifest-based tracking system to document the proper management of material to its final destination.

#### **3.4 Disposal Facility Selection**

Soil and material waste transported off-site will be disposed of at facilities that are pre-authorized by Chemours as provided in this plan or in consultation with NCDEQ.

The following documentation will be required for each disposal destination:

- Permits for each disposal facility acknowledging that they are a registered solid waste facility in accordance with applicable local, state, and federal regulations.
- A letter or other written communication with each disposal facility describing the material to be disposed of and requesting written acceptance of the material. This communication will include:





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- that material to be disposed of may contain PFAS;
- the project identity and the name and phone number of the appropriate Chemours representative;
- a summary of laboratory analytical data pertaining to the material being transported.
- A letter or other written communication from each disposal facility indicating acceptance of the material intended to be disposed of.

These documents will be provided to Chemours prior to off-site disposal and will be maintained until Project completion.



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#### **4 DOCUMENTATION**

This plan will be updated under the following conditions:

- Federal or State laws or guidance are implemented that materially affect the approach described herein;
- Methods described herein are materially altered;
- The material characterization processes are changed;
- New approved disposal facilities will be updated as they are approved.

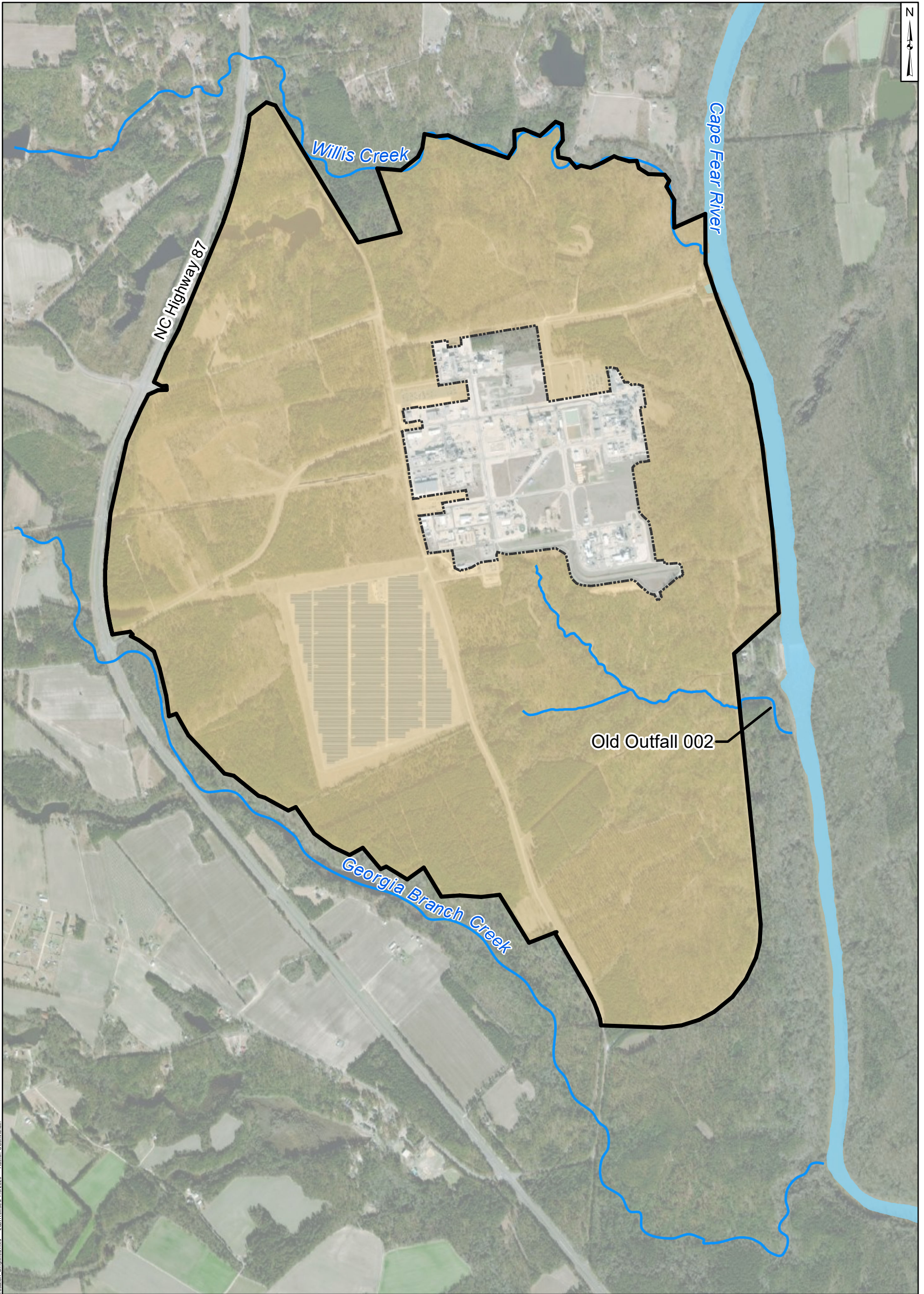
Chemours will maintain records of volumes of soil and materials requiring offsite disposal facility, soil and material sampling and associated laboratory reports, profiling documentation, and manifests/bills of lading for a minimum of three years.



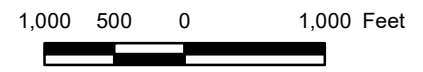
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## FIGURES





Legend	
	Site Boundary
	Nearby Tributary
	Manufacturing Area
	Non-Manufacturing Area



**Site Location Map**  
Chemours Fayetteville Works, North Carolina



Raleigh July 2020

**Figure**  
**1**

**Notes:**  
 1. Soil management plan will apply to environmental restoration activities occurring outside of the manufacturing facilities at the Site (i.e. outside of the security controlled fence area). Activities include restoration and remediation activities at the onsite groundwater seeps, and the Old Outfall 002 amongst other potential locations.  
 2. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).  
 3. Basemap sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Path: P:\P\Projects\TR0795 Database and GIS\GIS Site Management Plan\TR0796\_Site\_Location\_simplified.mxd Last Revised: 7/2/2020 Author: S.Somraiah  
 Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet Units in Foot US





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## APPENDIX A SMWMP CONTACT LIST



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### SMWMP CONTACT LIST

<b>COMPANY</b>	<b>NAME</b>	<b>PHONE NUMBER</b>	<b>ROLE</b>