



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: May 2, 2022  
Comment Deadline: June 1, 2022  
Corps Action ID Number: SAW-2019-00206

The Wilmington District, Corps of Engineers (Corps) received an application from The Chemours Company, c/o Sebastian Bahr, seeking to modify the October 2, 2020 Department of the Army authorization, associated with remediation of perfluoroalkyl and polyfluoroalkyl substances (PFAS) at the existing Chemours Plant located at the Cumberland and Bladen County line, south of Fayetteville, North Carolina. The modification request includes the construction of a barrier wall within jurisdictional Waters of the U.S., the extraction of groundwater, and the installation of a treatment system.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at:

<https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>

**Applicant:** The Chemours Company  
c/o Sebastian Bahr  
22828 NC Highway 87 W  
Fayetteville, North Carolina 28306

**AGENT (if applicable):** GEOServices, LLC, Geotechnical and Materials Engineers  
Chris Butler, Project Manager  
2561 Willow Point Way  
Knoxville, Tennessee 37931

## Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of the following Statutory Authorities:

- Section 404 of the Clean Water Act (33 U.S.C. 1344)
- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

## Location

### Location Description:

Project Area (acres): ~137-acres                      Nearest Town: Fayetteville  
Nearest Waterway: Cape Fear River                      River Basin: Cape Fear  
Latitude and Longitude: 34.837111 N, -78.824054 W

## Existing Site Conditions

The project site is located in southern Cumberland and northern Bladen County, south of the town of Fayetteville. The north boundary of the site begins along the southern edge of Willis Creek and the site continues south, bounded on the east by a Cape Fear River, on the west by the plant Chemours plant facility, and on the south by Glengerry Road and Bill Hall Road. Current land use includes woodlands, a water treatment facility, monitoring wells, and access roads. A per- and polyfluoroalkyl substances (PFAS) containment system is being built on-site at this time.

The project site is composed of mixed hardwood/pine forest habitat, monitoring wells, a water treatment facility, and several unimproved access roads. Forested habitat within the site is primarily mid- to late successional that naturally regenerated following historic logging activities. Dominant canopy species include box elder (*Acer negundo*), red maple (*Acer rubrum*), bald cypress (*Taxodium distichum*), northern red oak (*Quercus rubra*), and sweetgum (*Liquidambar styraciflua*). Midstory species include red maple (*Acer rubrum*), ironwood (*Carpinus caroliniana*), sweetgum (*Liquidambar styraciflua*), and invasive shrubs such as Chinese privet (*Ligustrum sinense*).

Permit History: A Department of the Army permit issued October 2, 2020, authorized permanent impacts to 330 linear feet of stream channel and 0.22-acre of wetland and temporarily impacts to 125 linear feet of stream channel and 0.01-acre of wetland for the purpose of constructing an in-stream flow-through cell water treatment system to address PFAS contamination on the project site in accordance with a Consent Order issued by the North Carolina Superior Court for Bladen County. The permit was subsequently modified on December 18, 2020, which authorized additional impacts to 1.95 acres of wetland and 1,710 linear feet of perennial stream associated with the in-stream flow-through cell water treatment system construction.

## Applicant's Stated Purpose

The purpose of the project is to comply with the Addendum Consent Order (CO) between Chemours, the State of NC, and Cape Fear River Watch to address discharges of perfluoroalkyl and polyfluoroalkyl substances (PFAS) at the Chemours Fayetteville Works. On October 1, 2020, the North Carolina Superior Court for Bladen County entered a CO among The Chemours Company FC, LLC (Chemours) and the State of NC and Cape Fear River Watch to address discharges of PFAS at the

Chemours Fayetteville Works. As a result of the CO, Chemours must reduce the amount of impacted surface water draining towards the Cape Fear River. As a part of the Addendum CO, a barrier wall is proposed to capture groundwater and surface waters from potentially discharging PFAS impacted waters to the Cape Fear River.

## **Project Description**

The applicant is requesting a modification to the previously issued authorization to include the installation of a barrier wall east of the existing facility, in a north to south alignment, which would be installed above, or at the 72-foot elevation (i.e. the 100-year floodplain). The proposed barrier wall, which will be located between the Chemours plant and the Cape Fear River, consists of a mix of cement, bentonite clay, and onsite soils to create a minimum permeability of  $1 \times 10^{-6}$  cm/sec and have a minimum thickness of 1.5-feet. The barrier wall would extend from the surface to approximately 80-feet below existing grade. The groundwater elevation on the upgradient side will be controlled using a network of wells and transferred to an onsite wastewater treatment plant.

Several groundwater seeps, identified as Seeps A, Seep A-Trib, Willis Creek Tributary and Seep B, are located along the alignment of the barrier wall. The barrier wall would capture surface flows from the first  $\frac{1}{2}$ " precipitation event and groundwater upgradient of the wall. Seep capture locations would include three catch basins at Seep A and a single catch basin at Seep B to divert baseflows and the first  $\frac{1}{2}$ " rainstorm event. The water would be transferred to pump stations where it will then be pumped to a proposed onsite surge pond. The surge pond will transfer the water to the onsite wastewater treatment plant prior to discharge to the Cape Fear River.

Direct fill impacts associated with barrier wall construction total 796 linear feet of stream channel. Additionally, the proposed project is expected to result in groundwater drawdown due to the proposed pumping system and would further impact approximately 3,795 linear feet of stream channel.

Wetlands are located within the proposed project area, within the 100-year floodplain of the Cape Fear River, and adjacent to Willis Creek, however, the applicant states that these wetlands will not be affected either directly or indirectly by the proposed project.

Groundwater modeling of the area was completed during the development of the groundwater remedy design. The modeling depicted a drawdown of groundwater on the eastern portion of the project area ranging from 4.5' below ground surface (bgs) to 0' of drawdown. The applicant states that it is not likely that a drawdown of a maximum of 4.5' bgs will impact the nature of wetland features. The Groundwater modeling report is included as an attachment to this notice.

Additionally, the applicant proposes to develop and implement a monitoring plan for this location, including the collection of appropriate baseline data prior to construction, in order to demonstrate that the project would not degrade onsite wetlands.

## **Avoidance and Minimization**

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: Given the current state of surface water chemistry at the Chemours facility, the value of water resources is significantly undermined by the presence of PFAS. PFAS laden waters cannot be utilized as a drinking water source, nor a recreational value. The installation of the barrier wall upgradient of these surface waters aims to meet water quality standards that can improve functional uses of the channels by removing PFAS constituents from the bedload. The proposed alterations will be improvements to general water quality of the subject features. Without the installation of the barrier wall, and in turn a lack of groundwater drawdown, the streams would continue to exist in an impaired condition with respect to geochemistry.

## **Compensatory Mitigation**

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment: Permanent impacts will result in approximately 796 linear of stream channel filled, to be mitigated at a 2:1 ratio. Groundwater drawdown areas resulting in 3,795 linear feet of stream channel is proposed to be mitigated at a 1:1 ratio. The applicant proposes to compensate for unavoidable wetland and stream impacts through the purchase of credits from an approved mitigation bank or purchase of in-lieu-fee mitigation, as required. If wetland losses are observed after construction, the applicant will quantify the amount through implementation of the wetland monitoring plan and coordination with the Corps and NC Division of Water Resources.

## **Essential Fish Habitat**

The Corps' determination is that the proposed project may adversely affect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

- This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project may impact (water columns, emergent wetlands) (see project description) utilized by various life stages of the following species: (anadromous fish species). Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by Fishery Management Councils and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

- The Corps will consult under the Magnuson-Stevens Act and will not make a permit decision until the consultation process is complete.
- The Corps has initiated consultation the Magnuson-Stevens Act and will not make a permit decision until the consultation process is complete.

### **Cultural Resources**

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that:

- Should historic properties, or properties eligible for inclusion in the National Register, be present within the Corps' permit area; the proposed activity requiring the DA permit (the undertaking) is a type of activity that will have no potential to cause an effect to an historic properties.
- No historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area; therefore, there will be no historic properties affected. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Properties ineligible for inclusion in the National Register are present within the Corps' permit area; there will be no historic properties affected by the proposed work. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; however, the undertaking will have no adverse effect on these historic properties. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; moreover, the undertaking may have an adverse effect on these historic properties. The Corps subsequently initiates consultation with the SHPO (or THPO).
- The proposed work takes place in an area known to have the potential for the presence of prehistoric and historic cultural resources; however, the area has not been formally surveyed for the presence of cultural resources. No sites eligible for inclusion in the National Register of Historic Places are known to be present in the vicinity of the proposed work. Additional work may be necessary to identify and assess any historic or prehistoric resources that may be present.

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required, and with full

consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

### **Endangered Species**

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information:

- The Corps determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.
- The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat.
  - By copy of this public notice, the Corps initiates consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
  - The Corps will consult under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
  - The Corps has initiated consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat. Consultation has been completed for this type of activity and the effects of the proposed activity have been evaluated and/or authorized by the National Marine Fisheries Service (NMFS) in the South Atlantic Regional Biological Opinion or its associated documents, including 7(a)(2) & 7(d) analyses and Critical Habitat assessments. A copy of this public notice will be sent to the NMFS.
- The Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The Corps will make a final determination on the effects of the proposed project upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

### **Other Required Authorizations**

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

**North Carolina Division of Water Resources (NCDWR):**

- The applicant did not provide or satisfy all 9 elements required for a complete 401 certification request. Therefore, the 401 Certification process has not started. The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500).
- The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. Unless NCDWR is granted a time review extension, a waiver will be deemed to occur if the NCDWR fails to act on this request for certification within 120 days of the date of this public notice. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, 401 and Buffer Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by August 30, 2022 to:

NCDWR Central Office  
Attention: Mr. Paul Wojowski, 401 and Buffer Permitting Unit  
(USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604

**North Carolina Division of Coastal Management (NCDCM):**

- The application included a certification that the proposed work complies with and would be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2 (b)(2) the Corps cannot issue a Department of Army (DA) permit for the proposed work until the applicant submits such a certification to the Corps and the NCDCM, and the NCDCM notifies the Corps that it concurs with the applicant's consistency certification. As the application did not include the consistency certification, the Corps will request, upon receipt,, concurrence or objection from the NCDCM.
- Based upon all available information, the Corps determines that this application for a Department of Army (DA) permit does not involve an activity which would affect the coastal zone, which is defined by the Coastal Zone Management (CZM) Act (16 U.S.C. § 1453).

## **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

## **Commenting Information**

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, June 1, 2022. Comments should be submitted to Liz Hair, Wilmington Regulatory Field Office, 69 Darlington Avenue, Wilmington, North Carolina 28403, at (910) 251-4049 or by email at [sarah.e.hair@usace.army.mil](mailto:sarah.e.hair@usace.army.mil).