

## FACT SHEET

### Termination of Administrative Order in lieu of Post-Closure Permit Johnston County Schools (Short Journey Center) NCD 981 476 955

An Administrative Order in lieu of Post Closure Permit (Administrative Order) was issued June 10, 2013 to Johnston County Schools for post-closure care and corrective action activities to address groundwater contamination at the Short Journey Center site located at 2323 Cleveland Road in Smithfield, Johnston County, North Carolina. The Administrative Order was issued under the Federal Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984.

The North Carolina Hazardous Waste Section (HWS) has determined that Johnston County Schools has satisfied the conditions of the Administrative Order and therefore is proposing to terminate the Administrative Order. In addition, Johnston County Schools has recorded a Declaration of Perpetual Land Use Restrictions (DPLUR) and associated survey plat on the subject property to restrict the use of groundwater and restrict the land use to nonresidential. When the public notice requirements specified in Sections XI and XIV of the Administrative Order have been met, a decision will be made as to whether or not to terminate the Administrative Order.

#### **Background**

The Short Journey Center site is a former school facility once owned and operated by Johnston County Schools and located at 2323 Cleveland Road in Smithfield, Johnston County, North Carolina. In 1982, the Johnston County Board of Education purchased 24,000 pounds of chemicals to be used to strip paint and shellac from furniture and floors. After stripping the gymnasium floor at Benson Elementary School, the resultant residue and sludge were placed in approximately five 55-gallon drums and disposed of in two unlined trenches located on the property. The property was purchased by the Catholic Diocese of Raleigh, North Carolina, in 1983 for the establishment of the Short Journey Center. However, ownership of the parcel of property that comprised the disposal area, including a buffer zone, was retained by the Johnston County Schools.

In response to a complaint of buried waste at the site, a representative for the North Carolina Division of Health Services collected soil samples in the vicinity of the buried waste on October 15, 1985. Chemical analysis of the soil samples indicated the presence of phenol, methylene chloride, and tetrachloroethylene (PCE). In addition, traces of methylated phenols, naphthalene, mixed hydrocarbons, trichloroethylene (TCE), and toluene were also reported. Methylene chloride, phenol, and toluene were known to be constituents of the paint stripping agent disposed of at the site. On November 5, 1985, North Carolina Health Services issued a Compliance Order and Notice of Administrative Penalty requiring Johnston County Schools to pay a penalty fee, to excavate contaminated soils, and to implement a groundwater monitoring program. In August 1986, following Closure Plan approval, sludge and contaminated soils were excavated from the two disposal trenches at the facility and transported to a hazardous waste landfill in Pinewood, South Carolina, for disposal. To ensure that all of the contaminated sludge and soil were removed from the area of the two trenches, two feet of overburden were removed and approximately eight to ten feet of normally saturated, visually contaminated soil and one foot of surrounding in-situ soils were excavated. The dimensions of the final excavation were approximately 15 feet by 15 feet in diameter and 12 to 14 feet deep.

Johnston County Schools was not able to remove all the existing soil contamination caused by the releases of hazardous waste in order to clean close the release area. In addition, groundwater down-gradient of the release area was impacted. On September 29, 1987, the North Carolina Division of Health Services issued a Compliance Order (Docket 87-489) to Johnston County Schools. The 1987 Order documented the actions taken as a consequence of the January 1982 release. The unit was certified closed on January 1, 1989 and the Closure Plan was certified on April 24, 1989. A Post-Closure Plan for the unit was developed and submitted in January 1988, revised in July 1991, August 1991, May 1993, and April 1996.

Since 1986, Johnston County Schools implemented numerous investigations to characterize the subsurface hydrogeologic conditions at the facility. Groundwater at the facility occurs at depths ranging between three and fifteen feet below ground surface as an unconfined aquifer within varying transmissivity zones as a result of subsurface heterogeneity. Groundwater at the facility is more transmissive within the upper portion of the aquifer with hydraulic conductivities ranging from 0.192 feet per day to 0.241 feet per day. Groundwater in the lower portions of the aquifer have transmissivity values an order of magnitude lower than compared with upper portions of the aquifer with an upward hydraulic gradient. In and around the facility the groundwater flow direction in both the upper and lower portions of the aquifer is to the north, towards an unnamed intermittent stream. The intermittent stream flows southeast and discharges into a surface water pond.

A pump and treat groundwater recovery system was installed at the facility in 1995 and groundwater treatment commenced in January 1996. Groundwater was extracted from an onsite monitoring well and treated water was discharged to the Smithfield sanitary sewer system. In October 2002, operation of the groundwater recovery system ceased. A Corrective Action Plan was submitted January 2013. The Remedial Strategy selected and approved by the HWS included Monitored Natural Attenuation and the inspection and maintenance of the RCRA Cap. Sampling was conducted in accordance with the most recent approved revised Groundwater Sampling & Analysis Plan dated January 2013. Annual samples were collected from onsite groundwater monitoring wells. In addition, a surface water sample was also collected from the unnamed tributary. Samples were analyzed for the presence of VOCs via EPA Method 8260B. The primary contaminants of concern in groundwater at the site were PCE and TCE.

The final groundwater and surface monitoring event occurred February 2020. As indicated in the Annual Groundwater and Surface Water Monitoring Report dated June 2020, all constituents of concern have been less than the NC 2L standard for at least three sampling events and no compounds have been detected in the surface water samples since 2013. The June 2020 Report recommended Johnston County Schools request termination of the Administrative Order and pursue a No Further Action determination. The Hazardous Waste Section approved this request in an email dated January 8, 2021. All monitoring wells on the subject property were abandoned on June 1, 2021. Finally, a Declaration of Land Use Restrictions (DPLUR) and associated survey plat on the subject property was recorded with the Johnston County Register of Deeds on January 10, 2022. The DPLUR includes restrictions on the use of groundwater and restriction of the land use to nonresidential. NCDEQ staff will inspect the site annually to verify compliance with the land use restrictions.

### **Public Hearing**

The North Carolina Hazardous Waste Management Rules require that the public be given a forty-five (45) day period to comment on the termination of the Administrative Order in lieu of Post-Closure Permit. This forty-five (45) day period will commence Friday, February 25, 2022 and end Monday April 11, 2022.

All documents associated with the Short Journey Center site are accessible through the document

management system at:

<https://deq.nc.gov/about/divisions/waste-management/laserfiche> or  
<https://edocs.deq.nc.gov/WasteManagement/Search.aspx?dbid=0&repo=WasteManagement>.

To locate relevant files: Click “Search” in the blue header;

Under customize search, click “Template” and under template select “WM”;

In the Subdivision menu select “Hazardous Waste”;

In the Doc\_Category select “Facility”;

Search using the program ID number: NCD981476955.

Persons wishing to comment or object to the termination of the Administrative Order in lieu of Post Closure Permit should submit such comments in writing prior to Monday April 11, 2022. All comments received within the forty-five (45) day period will be considered before the final decision is made.

Comments should be sent to:

Adam Ulishney, Hazardous Waste Section Chief  
Division of Waste Management, NCDEQ  
1646 Mail Service Center  
Raleigh, NC 27699-1646

A public hearing to receive comments on the proposal to terminate the Administrative Order will be held on Wednesday April 6, 2022, at 6 pm, at the Facilities Services Building, 601a West Market Street, Smithfield, Johnston County, North Carolina. Attendees will have the opportunity to present five-minute oral statements regarding the proposed termination of the Administrative Order. Attendees may also submit a written statement for the official record in addition to or in lieu of making an oral statement. When a final decision is made to either continue or terminate the Administrative Order, notice will be given to Johnston County Schools and to each person who has submitted written comments or requested notice of the final decision. Anyone desiring additional information may contact Katherine O’Neal at 919-707-8209 or [katherine.oneal@ncdenr.gov](mailto:katherine.oneal@ncdenr.gov).