



Westinghouse Columbia Fuel Fabrication Facility Hopkins, South Carolina

Community Update

October 2020

DHEC welcomes opportunities to have meaningful dialogue with our stakeholders as we continue to ensure the health of the public and our environment are promoted and protected. DHEC is committed to stakeholder engagement and has been working closely with residents, elected officials and other local organizations who are interested in the operations at the Westinghouse Hopkins facility to ensure ongoing communication. As part of DHEC's commitment, we are providing this update to keep community members informed.

Westinghouse | Westinghouse owns and operates the Columbia Fuel Fabrication Facility located in Hopkins, South Carolina.

Nuclear Regulatory Commission (NRC) | Radiological operations at Westinghouse are regulated by NRC through an NRC license. NRC's oversight of these operations includes routine facility inspections.

South Carolina Department of Health and Environmental Control (DHEC) | DHEC issues air and water permits to regulate non-radiological air emissions and water discharges from the facility. DHEC also has the authority to require Westinghouse to investigate and cleanup any radiological or non-radiological releases to the environment (i.e. groundwater, surface water, soils and sediments) - both within the property boundaries and beyond.

Lower Richland County Communities | Residents in the communities of the Hopkins-Lower Richland area are collaboratively working with DHEC, elected officials, and other local organizations to strengthen communication and ensure accountability and transparency of environmental investigations at the Westinghouse site.

CONSENT AGREEMENT

DHEC entered into a Consent Agreement with Westinghouse on February 26, 2019, to ensure coordination and communication between DHEC and Westinghouse. The Consent Agreement is a comprehensive and accountable mechanism that addresses past environmental issues and future responses through investigation, analysis, decision-making, and action. Official documents related to the ongoing investigation are posted on DHEC's webpage (www.scdhec.gov/Westinghouse) in the Bureau of Land & Waste Management section. DHEC held a community meeting on July 25, 2019, to provide an overview of the Consent Agreement and any progress updates.

Remedial Investigation

Phase I of the Remedial Investigation was completed in December 2019 and included collecting samples from private water supply wells, installing new groundwater monitoring wells, and collecting samples of groundwater, surface water, sediment, and soil. The data shows that contaminants from the plant operations do not extend beyond Westinghouse property boundaries.

DHEC is currently reviewing the "Interim Remedial Investigation (RI) Data Summary Report" from February 2020. This report summarizes the data and activities conducted during Phase I of the remedial investigation. Based on a review of this report and its supporting data, DHEC will identify areas where additional data will need

to be collected during a Phase II investigation. In September 2020, Westinghouse submitted a Work Plan for Phase II of the Remedial Investigation. DHEC is currently reviewing the Work Plan.

Upper & Lower Sunset Lakes (located on Westinghouse property)

During Phase I of the Remedial Investigation, 49 sediment samples were collected from Upper and Lower Sunset Lakes, which are located on Westinghouse property. Of the 49 samples collected:

- 4 samples showed some elevated detections of uranium;
- 45 of the samples did not show levels of uranium above residential use screening levels;
- All sediment samples taken downstream of Lower Sunset Lake showed levels that were lower than residential use screening levels.

As a possible explanation of the elevated uranium detected in these sediments, Westinghouse informed DHEC that there had been a wastewater lagoon failure in October of 1971. This release resulted in the discharge of up to 1.5 million gallons of wastewater through the storm water ditches and into Upper and Lower Sunset Lakes. While this may be the cause, DHEC is requiring additional sampling in Phase II of the Remedial Investigation to further delineate the contamination within Upper and Lower Sunset Lake. There is no uranium in the groundwater anywhere near Upper and Lower Sunset Lakes ruling out a groundwater plume as a possible source of uranium in these sediments. The highest level of uranium detected in surface water samples was 1.78µg/L, which is well below the SC drinking water standard of 30µg/L.

SeaLand container removal

Westinghouse has completed removal of all drums from the SeaLand containers. Westinghouse is working with the U.S. Environmental Protection Agency to determine the best removal and disposal practices for drums that potentially contain PCE and low levels of uranium. Westinghouse has created a storage area for these drums and has moved them out of the SeaLands. Westinghouse is currently coordinating disposal of all the SeaLand containers.

East Lagoon

Westinghouse conducted an assessment of the sludge material in the East Lagoon in order to determine appropriate disposal protocols. Westinghouse has requested an alternative disposal facility be approved by NRC for the disposal of this material. Once the removal of the East Lagoon sludges and liner has been completed, Westinghouse will implement a sampling plan to assess the condition of soil and groundwater beneath the liner. This may result in excavation of soil beneath the liner if elevated levels are detected. At this time, there is no evidence that the East Lagoon liner is leaking.

On June 30, 2020, Westinghouse submitted a closure plan for the East Lagoon for DHEC's review. Additionally, Westinghouse has submitted a wastewater construction permit application for rerouting the wastewater inputs to the lagoon.

DHEC Comments to NRC

DHEC requested NRC to consider requiring Westinghouse to conduct an environmental impact statement (EIS) as part of its license renewal. An EIS is part of the Federal National Environmental Policy Act (NEPA) process. NRC has agreed to conduct an EIS for the facility.

AIR AND WATER PERMITS

DHEC also regulates the Westinghouse Columbia Fuel Fabrication Facility using permits issued by the Bureau of Air Quality and the Bureau of Water. Non-radiological **air emissions** are regulated by an Air Quality State Operating Permit. As part of DHEC's air permitting process, Westinghouse is required to demonstrate that the highest potential air emissions would not contribute to exceedances of state and federal air quality standards, which are set to be protective of health and the environment. Non-radiological **wastewater discharge** is regulated by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits regulate the discharge of treated wastewater to Waters of the State so that aquatic life and human health standards are met in the receiving stream. Wastewater from Westinghouse is treated and tested before being discharged into the Congaree River. Radionuclide emissions and radioactive materials are regulated under the Atomic Energy Act and by the U.S. Nuclear Regulatory Commission (NRC).

Air Quality Operating Permit #1900-0050

Westinghouse is permitted to operate a nuclear fuel assembly fabrication facility in compliance with state and federal air quality regulations. Operations include chemical conversion of uranium hexafluoride to uranium dioxide, pellet formation, material recovery operations, and mechanical component manufacturing. Westinghouse has submitted a request to renew their State Operating Permit. Westinghouse is allowed to continue operating under the conditions of the expired operating permit until such time as the renewal request has been acted upon.

Water NPDES Permit #SC0001848

Westinghouse is permitted to discharge treated wastewater to the Congaree River under a National Pollutant Discharge Elimination System (NPDES) permit issued by DHEC. This permit sets monitoring requirements, such as dissolved oxygen (DO), pH, total suspended solids (TSS), ammonia-nitrogen, phosphorous, fluoride, total residual chlorine (TRC), *E. coli*, and whole effluent toxicity (WET), as well as any necessary pollutant limits, on the effluent from the wastewater treatment system. The NPDES permit also sets requirements for monitoring the groundwater in the area surrounding the wastewater treatment system for radioactive elements, fluoride, nitrite, volatile organic compounds, semi-volatile organic compounds, pH, and other indicators of environmental health.

Permitting Next Steps

On September 26, 2019, DHEC held a public meeting to share information about proposed renewals of the air quality and NPDES permits for Westinghouse. DHEC also held a thirty-day public comment period, which ended on October 12, 2019, for both draft permits. **All comments are currently being reviewed**

DHEC's Regulatory Tools

Consent Agreement

- Requires Westinghouse to conduct a comprehensive sitewide environmental assessment to fully determine the extent of contamination at the site
- Requires coordination and communication with DHEC
- Addresses past environmental issues and future responses

Air Quality permit

- Sets monitoring and testing requirements to demonstrate compliance with state and federal air quality regulations

NPDES permit

- Sets monitoring and limits (if necessary) on pollutants discharged to the Congaree River from the facility's wastewater treatment system
- Requires monitoring of groundwater associated with wastewater treatment units

and considered as part of the permit renewal process. DHEC will notify community stakeholders when a decision is made. Additional information, including the current Air and NPDES permits, the permit renewal applications, and the draft Air and NPDES renewal permits, can be found on our Westinghouse webpage at www.scdhec.gov/Westinghouse.

Fish Tissue Study

In response to water quality and public health concerns, in August 2019, DHEC staff collected and analyzed bluegill sunfish (bream) from the Congaree River to determine if the fish are accumulating uranium and fluoride from the Westinghouse effluent discharge. In summary, the study revealed that the levels of uranium and fluoride did not pose a water quality concern or public health risk for fish consumption. Based on the results obtained from this study, additional evaluation is not presently planned. For complete details of the sampling and analyses performed, please read the entire report found in the Bureau of Water section of our webpage at www.scdhec.gov/Westinghouse.

If you would like additional information about DHEC's regulatory role regarding Westinghouse and our ongoing commitment to keeping the community informed, please visit www.scdhec.gov/Westinghouse or contact:

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If you would like more information about the operations at the site, or to request to be on Westinghouse's community mailing list, please visit www.westinghousenuclear.com/columbiacommunity or contact:

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If you would like more information about the United States **Nuclear Regulatory Commission (NRC)** and its oversight of radiologic operations at the Westinghouse site, please visit: <https://www.nrc.gov/info-finder/fc/westinghouse-fuel-fab-fac-sc-lc.html>.

