



To: Interested Stakeholders

From: Byron Amick, Environmental Engineering Associate
Industrial Wastewater Permitting Section
Water Facilities Permitting Division
Bureau of Water

Date: September 15, 2023

Re: WESTINGHOUSE ELECTRIC COMPANY LLC/COLUMBIA FUEL FABRICATION FACILITY
NPDES Permit # SC0001848
Richland County

The Department has reviewed your comments on the draft NPDES permit. The following are the responses to comments received on the most recent draft (public notice ending June 2023) (see 1-10 below) and the previous draft (public notice ending October 2019) (see 11-25 below).

Responses to the comments received during the second public notice which ended in June 2023:

- 1) While the department has stated that water in the manufacturing process is not wastewater, and therefore not under the purview of this permit, it should be clarified that any spill at the facility that may impact the environment or human health must be reported to both DHEC and the NRC.

Response: The 24-hour reporting language in the permit requires reporting of non-compliance with the conditions of the permit which may endanger human health or the environment. This includes any spill or release of untreated wastewater that reaches waters of the State. Additionally, Part II.E.6 of the permit, includes requirements related to wastewater collection systems. Reporting requirements for other incidents/emergencies not related to wastewater collection, storage, treatment, or discharge is outside of the scope of the NPDES permit. Additionally, the Department requires an extensive groundwater monitoring network to monitor for releases from the wastewater treatment system.

Concerning spills/releases outside the scope of this permit, the Bureau of Land and Waste Management (BLWM) has a communication protocol with Westinghouse that requires them to report spills and releases to DHEC within 24 hours of a spill/release, even if the volume of the spill/release is less than a legally required reportable quantity. This allows the Department to evaluate the situation and make recommendations for addressing potential impacts from the spill/release.

- 2) We support the new tighter limits on ultimate oxygen demand that will be more protective of the Congaree River, especially during the critical summer months.

Response: We appreciate your support in the Department's efforts to protect the Congaree River.

- 3) We support the department's inclusion of new M&R requirements for indicator parameters and believe this should also include an M&R requirement for nitrates.

Response: Based on the existence of a nitrate groundwater plume being monitored as part of the ongoing site remediation projects, the Department recognizes the potential for Nitrate contamination of the discharge. The current draft permit already requires monitoring for Total Nitrogen, which includes nitrate, nitrite, ammonia, and organic nitrogen. Therefore, the Department will agree to include Nitrate monitoring to determine how much of the total nitrogen in the discharge is nitrate.

- 4) Due to the age of this facility, and numerous past lapses in both management and oversight, the permit must include robust operation, maintenance and inspection requirements for lagoons, liners, and other portions of the wastewater treatment process.

Response: The draft permit, in Part V.E.10, requires a robust set of Surface Impoundment Requirements particularly for the lagoons and liners. Other portions of the wastewater treatment process are covered by other requirements such as the performance of daily treatment facility inspections by a certified operator of the appropriate grade, wastewater collection system requirements, and the annual diffuser inspection requirement.

- 5) The permit should include a monitor and reporting requirement for PFAS chemicals. If the department is not prepared to include that permit limit at this time, there should be a reopener clause that allows the new limit to be added before the next permit renewal cycle.

Response: As noted the request, the Department is not including PFAS limits at this time since there is no evidence that PFAS are present in the discharge and there are no established standards at this time. Should either situation change, the Department does not need a reopener clause to reopen the permit to require PFAS monitoring or establish a PFAS limit. Because the Department can do this without a reopener clause, there will be no change to the permit at this time.

- 6) As several of the ongoing pollution issues are being addressed by a consent agreement, the Bureau of Water must communicate and work closely with both DHEC's BLWM, and the United States Nuclear Regulatory Commission (USNRC) to ensure issues are being addressed appropriately.

Response: We are aware of the other Bureaus and Agencies that have interest in this site and its permits. We have attempted to coordinate and be as consistent as possible with the other regulatory authorities involved and will continue to coordinate with these authorities in the future.

- 7) **Groundwater sampling:** The commenter has noted that the groundwater sampling system now comprises of over 100 wells. Some floodplain wells detected Chlorinated Volatile Organic Compounds (CVOCs) and of particular concern are CVOCs in wells downgradient of Mill Creek and the Sunset Lakes. They are also concerned about the standard of "off-site" migrations being used to judge the impacts of groundwater and surface water pollution. While inspecting the maps of contamination plumes the

commenter notes that both nitrates and CVOCs were detected in Denley Cemetery and requests remediation to address this contamination of an historic cemetery.

Response: In relation to the NPDES permit, the 40 wells in this permit are determined to be the wells best suited to monitor for potential impacts from the wastewater treatment system. As noted in the comment, there are many other wells related to the site remediation program. While we do not believe it is necessary to add additional wells to this permit at this time for assessment of the wastewater treatment system, we have passed your comment on to the BLWM. Additionally, groundwater data is shared between both programs. See response from BLWM below.

The remedial investigation defined the nature and extent of legacy contamination. Westinghouse recently submitted a Feasibility Study Work Plan which outlines the approach for conducting the Feasibility Study (FS). The FS will evaluate cleanup alternatives for each of the Operable Units at the Site. Once the FS is finalized, the Department will draft a Proposed Plan which outlines DHEC's preferred cleanup remedy. The public will have an opportunity to review and comment on all the evaluated remedies before a final remedy is selected. After the comment period ends, DHEC will evaluate all the comments received and will document the selection of the final remedy in a Record of Decision (ROD). The ROD will include details of the selected remedy and will establish the cleanup goals for the remedy. Groundwater and Surface Water monitoring will continue until the remedy has been implemented and the remedial goals have been reached.

- 8) **Surface water sampling:** The commenter notes the contaminants detected in the surface water sampling of the drainage ditches, Gator Pond, and Upper and Lower Sunset Lakes. There is concern that Westinghouse conducts monthly surface water sampling but does not make their data publicly available.

Response: This is beyond the scope of the NPDES permit. However, we have passed your comment onto BLWM and Westinghouse.

- 9) **Sediment sampling and the Sediment Transect Sampling Work Plan:** The commenter notes the contaminants detected in the sediments in the stormwater ditches, wastewater treatment plant lagoons, and both Sunset Lakes, and believes this warrants further study. There is a concern that Upper and Lower Sunset Lakes are essentially managed as (unlined) settlement ponds and suggests the legacy sediments be removed.

Response: This is beyond the scope of the NPDES permit. We have passed your comment on to BLWM. See response from BLWM below:

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10) **Threatened and Endangered Species:** The data for the mapping of Shortnose Sturgeon has been updated since the permit was originally drafted. Endangered bird species are also noted as living along the Congaree River corridor. It is requested that the permit rationale incorporate updated species information for fully evaluate the risk of the surface water discharge.

Response: This subject was addressed in the first round of comments from the public notice. The response to comment 25 below was updated using current data.

Responses to the comments received during the first public notice which ended in October 2019:

11) A request that the Department deny the renewal of the NPDES Permit, based on the belief of the petitioner that Westinghouse is not responsible enough to operate the facility safely and the potential of long-term impacts to the Congaree River.

Response: South Carolina Regulation 61-9 Section 122.1(g)(2) states that if the Department finds that, after providing an opportunity for public hearing and considering public comments, the discharge will not be in contravention to the provisions of the South Carolina Pollution Control Act or the Federal Clean Water Act, a permit to discharge must be issued. Additionally, the water quality standards used for determining permit limits were developed to account for both short-term and long-term impacts to the environment.

12) Requests to issue the permit for a short time rather than 5 years.

Response: The Department believes that 5 years is the appropriate time frame for this permit and finds no justification for a shorter amount of time. If new information comes to light that would require changes to the permit, it can always be reopened and modified prior to the permit expiration.

13) A request to have someone in place to notify DHEC as soon as possible in the event of an emergency.

Response: The permit includes a 24-hour reporting requirement for the reporting of non-compliance with the conditions of the permit which may endanger human health or the environment. This includes any spill or release of untreated wastewater that reaches waters of the State. Reporting requirements for other incidents/emergencies not related to wastewater collection, storage, treatment, or discharge is outside of the scope of the NPDES permit.

14) There were questions concerning the residential wells that have been tested in the Hopkins area.

Response: The testing of residential wells is not regulated by this permit. However, there are no known off-site impacts to residential wells from operations or from environmental contamination at the

Westinghouse site. If you have questions concerning residential well testing results, please contact Keisha Long by phone at 803-898-0774 or by email at LONGKD@dhec.sc.gov.

15) A commenter asked, "where are the 40 new wells" and "how and when will they be monitored".

Response: This permit has a total of 40 groundwater monitoring wells, 20 existing from the previous permit and 20 additional wells included in the permit reissuance. All the wells located on the site property are near the wastewater treatment units. They are to be monitored in the spring and fall of each year, as specified in the permit, using the appropriate EPA-approved method. Other monitoring wells related to the overall site assessment are monitored through the Consent Agreement by the Department's BLWM. Maps of well locations can be found in reports available at the DHEC website for Westinghouse, specifically the page for the Bureau of Land and Waste Management: (<https://scdhec.gov/environment/environmental-sites-projects-permits-interest/westinghouse/westinghouse-bureau-land-waste-management>).

16) Concerns about the drums on-site and any monitoring of these drums.

Response: Management of the drums are not within the regulatory scope of this permit. Management of the drums falls under the Administrative Order on Consent with the US EPA. Any releases of hazardous substances where the drums were stored in the SeaLand containers will be addressed by DHEC's Consent Agreement referenced previously.

17) What is dewatering and is it dewatered in Hopkins, SC.

Response: One of the wastewater streams generated at the site has a large amount of Calcium Fluoride (CF) solids. These solids are allowed to settle out of the wastewater in the West I and West II Lagoons. Once there are enough solids collected in the bottom of these lagoons, they are routinely cleaned to remove the material. This material is taken to a sludge press on-site near the two West Lagoons. The sludge press squeezes excess water from the material, and this is called dewatering. The dewatered material is allowed to dry further on pads at the site before it is recycled by the cement industry.

18) What are the different types of uranium and what does the numbers mean 233, 234, 236 and 238?

Response: The different types of uranium refer to different uranium isotopes. The number is the way to identify the different isotopes. This number represents the Isotopic mass of the Uranium atom. For example, the naturally occurring U-238 has 92 protons and 146 neutrons. As the atom loses neutrons it becomes a different isotope and the number changes. Each isotope has unique properties related to their stability and how long it takes to decay.

19) Due to the history of unreported spills at the facility, we recommend that section II.L.5.b(5) be changed to "Any spill or release of untreated wastewater." This can help ensure the proper and timely reporting of spills that, while they may not reach surface waters of the State, may still impact groundwater and/or the environment.

Response: The 24-hour reporting requirement in the permit is for the reporting of non-compliance with the conditions of the permit which may endanger human health or the environment. This includes any spill or release of untreated wastewater that reaches waters of the State. Additionally, Part II.E.6 of the permit includes requirements related to wastewater collection systems. Reporting requirements for other incidents/emergencies not related to wastewater collection, storage, treatment, or discharge is outside of the scope of the NPDES permit. Additionally, the Department requires an extensive groundwater monitoring network to monitor for releases from the wastewater treatment system.

20) While we understand and agree with the addition of an M&R limit for Oil & Grease because of the proposed introduction of the UCON wastewater, the permit should be abundantly clear that the discharge of Oil & Grease to waters of the State is strictly prohibited. A reference in section III.A.3 to the visible sheen language from section V.A.1 may accomplish this.

Response: A footnote was added to the Oil & Grease monitoring requirements, directing the permittee to "See Part V.A.1". This is a reference to the general rules and standards applicable to all waters as stated in SC Regulation 61-68.E.5.

21) Operation of lagoon and liner inspection, suggest liner inspections annually.

Response: In previous iterations of the permit, the maintenance of surface impoundments, including the any liners, were addressed under the Operations and Maintenance Manuals. This permit cycle includes a new, more detailed surface impoundment inspection and maintenance program. This entails both routine monthly inspections and annual detailed inspections by a professional engineer. These inspections are for both structural integrity of the basin and basin liners. All basins are to have a detailed annual inspection, but two basins, with respect to the liner, are allowed to conduct the detailed liner inspection biennially. This is because while sludge is on the liner it is not possible to inspect the liner. For these basins sludge is removed every two years. Therefore, when sludge is removed, then the detailed inspection will occur.

22) The DMR data as described in the permit rationale vs recently reported DMR data and TRC excursions:

Response: It is stated in the rationale that DMR data used to evaluate permit limitations is from April 2013 thru July 2018. This data was current at the time the evaluation was taking place. The TRC excursions that occurred in early 2019 have been noticed by the Department's Compliance and Enforcement Division and a letter of violation was issued on June 21, 2019. Corrective actions have been taken and no further TRC violations have occurred. Improvements to the chlorination system were permitted for installation on January 31, 2020, and the improvements were completed and approved for operation on August 4, 2020. There have been no TRC excursions since the installation of the chlorination system upgrade. There was also an excursion of the BOD limit in May of 2022, there have been no violations of the BOD limit since that time.

23) Request that a numeric limit for TSS be placed on Outfall 01A:

Response: As stated in the permit rationale there is no additional TSS treatment for the sanitary flow after it exits the sanitary lagoon. Therefore, to ensure that the sanitary treatment system is operating as required the secondary treatment standard needs to be applied at the internal outfall. Outfall 01A in the permit has been modified with a TSS limit.

24) Support for monitoring Copper and Mercury, with a preference to limit Mercury in the permit, since both have been tested as present in the discharge and the stream is listed on the 303(d) list as impaired for these parameters.

Response: While two of the three samples for mercury did have a detectable amount the concentration detected was less than 10% of the instream standard. Considering the amounts detected, statistically there is no reasonable potential for the discharge to cause or contribute to the instream impairment. With the requirement to implement a mercury minimization plan and continued monitoring in the permit, the Department can determine if conditions change that warrant a mercury limit at a later date.

It has come to our attention that the receiving stream is not impaired for copper at the facility outfall. The special study that found the copper impairment had two instream monitoring stations between the outfall and the impaired station. Neither of those stations indicated a copper impairment. Westinghouse reported in the 2C application a positive concentration of copper in the effluent, but that result was not above the water quality criterion. With this new information it would be inappropriate to include copper in the permit as if it were to a stream impaired for copper.

25) Endangered species database seems woefully out of date.

Response: The Department uses the Heritage Trust database to identify Endangered, Threatened and Species of Concern. SCDNR provides the agency with a rest service providing real time data accessed by staff through an account. The permit rationale has been updated to include the more recently identified Shortnose Sturgeon habitat as the Congaree River including the Congaree National Swamp. The endangered and threatened species map in Attachment 5 has also been updated. As noted in the comment the freshwater mussels of concern are well outside the area of evaluation. The receiving stream provides a dilution factor of over 7500:1, and the permit is believed to monitor everything in the discharge that may have an impact on these species. The other identified species such as the Bald Eagle and Wood Stork, which do not live in the Congaree River but may utilize the river as a food source, are protected by the Department's use of aquatic life standards to protect the species upon which they feed. Barring any new information, the Department believes the permit is protective as written.