



April 27, 2020

Office of Administration  
Mail Stop: TWFN-7-A60M  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
ATTN: Jessie Quintero, Program Management, Announcements and Editing Staff

**Re: SC Department of Health and Environmental Control Comments on the Draft Environmental Assessment (EA) for the Westinghouse Columbia Fuel Fabrication Facility pursuant to National Environmental Policy Act (NEPA)  
[Docket ID NRC-2015-0039]**

The South Carolina Department of Health & Environmental Control (SCDHEC) appreciates the opportunity to comment on NRC's draft EA and proposed Finding of No Significant Impact (FONSI) for a 40-year license renewal for operations at the Westinghouse Columbia Fuel Fabrication Facility. Based on the new environmental data being generated at the site under SCDHEC's Consent Agreement with Westinghouse and the comments below, the Department is requesting that an Environmental Impact Statement (EIS) be performed.

The following comments are provided for NRC's consideration.

1. Over 40 new groundwater monitoring wells were installed over the summer of 2019 and the data from these wells along with new sediment, surface water and soil samples, were submitted in late February 2020. This work is being conducted pursuant to a Consent Agreement (CA) with SCDHEC which, in part, requires a site-wide environmental investigation. The new environmental data continues to support the conclusion that contamination from environmental releases are confined to within the property controlled by Westinghouse and there is no known off-property contamination. However, there is now evidence that detectable levels of volatile organic contaminants extend beneath and beyond the Upper Sunset Lake. This is likely due to the hydrologic effects of Upper and Lower Sunset Lakes (i.e., impounded stretches of Mill Creek), in combination with the by-pass canal, the hydrogeology of the flood plain aquifer system, and the length of time these contaminants have been moving. A better resolution of the extent of COC's within the flood plain hydrogeologic system is yet to be determined and will be requested of Westinghouse in follow-up work under the CA. However, this supports the Department's request for NRC to direct Westinghouse to conduct an EIS as the Department does not consider the work done under the CA as taking the place of an EIS under NEPA.

2. Elevated concentrations of Uranium have now been documented in Upper and Lower Sunset Lakes which had not previously been identified until the CA investigation. Westinghouse informed SCDHEC that there was an incident in 1971 where a former wastewater lagoon ruptured and released up to 1.5 million gallons of wastewater into Upper Sunset Lake through the drainage system. The draft EA does not discuss this event nor were current SCDHEC staff aware of it through existing records. The NRC has found that this event was reported and included in the first licensing EA in a 1975 Environmental Report, but the event has not been included in any further EA's over the years. Four of forty-nine sediment samples from Upper and Lower Sunset Lakes exceeded the Residential Uranium Soil Level (RIUSL) for Uranium 233/234 (13 pCi/g) or Uranium 238 (14 pCi/g). Westinghouse did not provide an explanation in the initial RI report to explain the reason these sediments contain elevated Uranium. Additional sediment sampling will be necessary to fully assess the sediment uranium content in these two lakes.
3. Procedures are in place now for better communication with the Department of any release or possible release to the environment going forward. Westinghouse will also have a far more robust groundwater and surface water monitoring program going forward than they ever had before.
4. Detection levels for Technetium-99 in groundwater and surface water are going to be lowered from 50 picocuries per liter to 1 picocurie per liter which will allow for a much finer resolution of where TC-99 is present. Two existing wastewater lagoons are planned for closure - the East Lagoon followed by the Sanitary Lagoon (which is not lined) which will eliminate opportunity for any future releases from these lagoons either by leakage to the groundwater or structural failure to the surface water pathways. This needs to be updated in any listing of Tc-99 detection limits based on the March 2019 Westinghouse Environmental Report.
5. The facility is asking for a 40-year license (2027 to 2067). The facility was constructed and started operations in 1969 and is now (2020) over 50 years old. This renewal, as proposed, contemplates continued operations until 2067 when the facility will be 98 years old. There is nothing in this EA that discusses infrastructure longevity. Infrastructure longevity issues should be addressed.
6. The discussion of geologic hazards, specifically seismicity (Section 3.2.3), is minimal in the NRC's draft EA. Section 3.3.3 of Westinghouse's EA report of March 2019 includes a discussion on seismicity but generally relates any risk as minimal and only from a Charleston area event. No discussion of the plant's susceptibility to a tremor of any magnitude is included. NRC's EA notes that seismic events are contemplated but NRC does not state whether the operational system and its structural support systems in the building and in exterior areas (tanks, piping, wastewater units, etc.) meet any seismic standard. The seismic classification standard in this part of South Carolina is Class C. Westinghouse should provide a seismic structural evaluation consistent with that classification. This further supports the Department's request to consider infrastructure longevity.
7. Section 3.3.2.2 (Line 12): states general permit for stormwater is SC0001848. That is incorrect. The general permit is SCR003391.

8. Section 2.4.2 (starting Line 28) implies there was no groundwater monitoring in the NPDES until recently. However, we've had GW monitoring since 2004. It would be more accurate to say "additional monitoring requirements were added to the NPDES permit."
9. From SCDHEC's original comment letter of Nov 6, 2019 the following technical/regulatory specific comment was submitted for the record: The EA states that Westinghouse is regulated under 40 CFR 61. However, this Section has not been applicable to Westinghouse since EPA revised 40 CFR 61 Subpart I in 1996.

If you need additional information, please contact me at 803-898-0835 or [taylorgk@dhec.sc.gov](mailto:taylorgk@dhec.sc.gov).



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cc: Myra C. Reece  
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## Quintero, Jessie

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**From:** Taylor, G. Ken <taylorgk@dhec.sc.gov>  
**Sent:** Monday, April 27, 2020 5:18 PM  
**To:** Quintero, Jessie  
**Cc:** Porter, Henry; Siron, Don; Berresford, James; Kuhn, Kimberly M.; Marcus, Mike; Thompson, Rhonda; Rippy, Crystal; Frost, Keith; Shealy, Renee; Reece, Myra; Dickman, Jacquelyn S.  
**Subject:** [External\_Sender] SCDHEC final comments on NRC Draft EA on Westinghouse Columbia Fuel Fabrication Facility  
**Attachments:** SCDHEC Comments on the NRC Draft EA for Westinghouse CFFF 04-27-2020.pdf

Jessie,  
Please find attached SCDHEC's final comments on the Draft EA.

Thank you for allowing the extra time to review the new environmental data and to make our final comments.  
Let me know if you have any questions.

Thanks,  
Ken

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