Comments from the Sierra Club Lone Star Chapter re: amendment to POS-D&O-0148 and application for Transport permit.

The Sierra Club submits the following comments to the Post Oak Savannah Groundwater Conservation District in advance of the public hearing on July 27, 2021. The Sierra Club is the nation's oldest and largest conservation organization; the Lone Star Chapter is the Texas chapter of the Sierra Club and was incorporated in 1965, with 28,000 members across the state and 160,000 members and supporters.

A 2019 Report by the Environmental Integrity Project (EIP) notes that "groundwater around the Sandow landfill is unsafe".¹ The report is attached as Appendix 1 to this comment, and discussion of the Sandow Steam Electric Station begins on page 53. The contaminants include the pollutants "arsenic, chromium, cobalt, lead, lithium, mercury, sulfate, thallium," all of which have well-documented harmful effects on human health. A larger report by the Environmental Integrity Project in 2019, confirms that "EPA identified six distinct coal ash dumps at Sandow, including one surface impoundment and five landfills. Some or all of these older ash dumps were probably closed in place, and they are likely to be current and future sources of contamination."² This second report is included as Appendix 2 to this comment.

The World Health Organization's (WHO's) website notes that "Inorganic arsenic is a confirmed carcinogen and is the most significant chemical contaminant in drinkingwater globally."³ "In addition to skin cancer, long-term exposure to arsenic may also cause cancers of the bladder and lungs."⁴ The WHO also notes that there are substantial other health issues linked to long-term effects of arsenic including developmental effects, diabetes, pulmonary disease, cardiovascular disease, infant mortality, adverse pregnancy outcomes, and continued effects on child development."⁵

⁴ ld.

⁵ Supra n. 3.

¹ Page 53 of Appendix 1.

² Page 38 of Appendix 2.

³ World Health Organization, (<u>https://www.who.int/news-room/fact-sheets/detail/arsenic</u>), (last visited July 27, 2021).

Arsenic is just one of the aforementioned pollutants present in groundwater that is attributable to Sandow's coal ash according to EIP. The Sierra Club Lone Star Chapter urges the Post Oak Savannah GCD to take all possible courses of action regarding increasing the amount of monitoring in wells that are further downgradient in the event that both the amendment and the transport permit are approved.

The Sierra Club Lone Star Chapter urges the Post Oak Savannah GCD to seriously consider potential human health harms in both responding to the application for amendment as well as the application for a transport permit. The Lone Star Chapter also urges the Post Oak Savannah GCD to work with Texas Commission on Environmental Quality and the Texas Water Development Board on potential hydrological impacts to the larger Carrizo-Wilcox aquifer and specifically the Simsboro formation, as well as those formations with nearby groundwater connections.

Finally, excessive groundwater pumping is inextricably linked to land subsidence generally.⁶ Here, it is imperative that the hydrogeology is taken into account, and the Sierra Club urges the Post Oak Savannah GCD to collaborate with TCEQ and the TWDB to investigate whether either the amendment or the new permit pose potential subsidence issues above ground that may cause land shifts that potentially worsen groundwater contamination from either surface impoundments of coal ash or landfills.

Respectfully,

Alex R. Ortiz, JD Water Resources Specialist Sierra Club Lone Star Chapter

⁶ United States Geological Survey, Land Subsidence, (<u>https://www.usgs.gov/special-topic/water-science-school/science/land-subsidence?qt-science_center_objects=0#qt-science_center_objects</u>), (last visited July 27, 2021).