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www.ogeecheeriverkeeper.org
Working Together to Protect the Ogeechee, Canoochee and Coastal Rivers

September 24, 2024

Via E-Mail

Caity McKee, Senior Planner
Coastal Regional Commission
cmckee@crc.ga.gov

Re: Comments on DRI # 4283 - Industrial Concrete Plant - Pembroke

Dear Ms. McKee:

Ogeechee Riverkeeper 501(c)(3) (ORK) works to protect, preserve, and improve the water quality of the Ogeechee River basin, which includes the Canoochee River, tributary streams, and all of the streams flowing out to Ossabaw Sound and St. Catherine's Sound. The Ogeechee River system drains more than 5,500 square miles across 21 counties in Georgia. ORK works with local communities to retain the ecological and cultural integrity of rivers, streams, wetlands, and related habitats throughout the Basin. One of ORK's primary roles is as watchdog on new land development projects throughout the watershed that could pose a significant threat to its water quality and aquatic environments.

Ogeechee Riverkeeper provides these comments on the Industrial Concrete Plant project proposed for Pembroke. ORK concerns fall into three categories - (1) site layout concerns, (2) stormwater management and aquatic resource protection, and (3) wastewater treatment. ORK asks that the City of Pembroke fully consider these concerns and to make reasonable adjustments at this planning stage to reduce environmental impacts over the plant's operational lifetime. Additionally, ORK ask for clarification about (4) DRI # 4284, which appears to be the same as this project but has already been "completed" according to the Department of Community Affairs webpage.¹

1. Amend Site Layout to Avoid Aquatic Resource Impacts

The proposed site layout presents impacts to wetlands and nearby waterways that are fully avoidable with slight adjustments. The wetlands present on the site are the first concern. The Conceptual Site Plan appears to show the proposed structures being located within the large wetland on Parcel 016-027-01. Even if it is not placed squarely in the wetlands, portions of those wetlands will need to be filled. That wetland fill is unnecessary when considering layouts that span both parcels. The Coastal Regional Commission (CRC) and the Development of Regional Impact (DRI)

¹ <https://apps.dca.ga.gov/DRI/AppSummary.aspx?driid=4284>

application material included in the public notice include both Parcel 016-027-01 as well as Parcel 016-027. When looking at the CRC's Green Infrastructure Map, a large, wetland-free, and already-cleared space exists. It appears that the proposed structures could be located in this area, avoiding any need to fill wetlands. As will be discussed below, this layout would also reduce potential impacts to the tributary stream to Mill Creek immediately to the south of the property, identified on the CRC maps as either "river" or "riverine" features. ORK asks the City of Pembroke to consider this relocation in order to preserve these important aquatic features. At the very least, ORK urges Pembroke to require an explanation and justification from the developers as to why this proposed layout and wetland fill is necessary.

2. Ensure Forward-Looking Stormwater Management and Flood Control

Robust and resilient stormwater management and flood control plans are crucial for this industrial site. The sand, aggregate, and raw materials storage as well as a "wash-out pit" presented in the Conceptual Site Plan all pose runoff and pollution concerns to the nearby Mill Creek tributary stream as well as to the wetlands on the property. With nearly the entire site located within Flood Zone A, also known as the 100-year floodplain, flooding will be a concern.² With storms being strong and more frequent, as recently seen with Tropical Storm Debby, stormwater management and flood damage prevention is becoming increasingly important. As such, forward-looking management is crucial at this planning stage. ORK urges the City of Pembroke to take steps to ensure stormwater and flooding concerns are addressed for the entire operational lifetime of this facility.

Considering an alternative site layout is a first step. Moving the structures, storage areas, and wash-out pit further away from tributary and property boundaries will help to prevent runoff pollution. As proposed, the raw materials storage area is placed almost immediately adjacent to the tributary stream. Even with the proposed detention pond, a strong storm or flood event could foreseeably wash this storage area out, overflow the detention pond, and eventually end up in Mill Creek. An alternative layout that places structures, storage areas, and detention ponds further away from this tributary would reduce potential runoff pollution during these storm and flooding events. At the very least, Pembroke should consider increasing buffer requirements from the property boundary, with additional attention paid to buffers between the industrial activity and the tributary.

A second step should be to require a flood impact control plan. From the Conceptual Site Plan, it is unclear how the storage areas and wash-out pit will be constructed. If left open, unconfined, and constructed without stormwater and flooding in mind, these areas pose runoff risks. A proactive and forward-looking flood impact control plan could set requirements, procedures, and action steps for the operators to follow to prevent unintended runoff pollution. Requiring this plan at these initial stages will ensure that a plan is in place from Day 1 and will avoid the need for reactive, last-minute planning for storms, floods, and hurricanes. ORK asks the City of Pembroke to require the applicants and operators to submit this plan as a condition to construction, development, and occupancy.

A third step should be to require stormwater detention features that go well beyond the minimum requirements. As noted, storms are becoming more frequent and more intense. ORK suggests basing management and construction of detention ponds on the 100-year and/or 500-year storms. Like with floodplains, these estimates are based on the likelihood of these storms occurring. Currently, the Savannah area's 100-year storm would add 10 inches of

² It should be noted that over a 30-years period, the actual risk of a 100-year flood event occurring in a Zone A property is 26% - a more than 1 in 4 chance. See <https://savannahga.gov/FAQ.aspx?QID=332> and <https://www.floodsmart.gov/flood-zones-and-maps>.

rain in a 24-hour period, with the 500-year storm raining 20 inches in 24 hours.³ In Pembroke, those numbers are 9.65 in and 13.2 in over a 24-hour period for the 100 and 500 year storms.⁴ It is important to note that these storms are understood to be smaller than recent data show and future estimates predict, as the current NOAA calculations are based on 2016 data.⁵ To extend the functional life of these features in protecting the area from flooding, ORK urges the City of Pembroke to require stormwater features to retain 125% of the 100-year storm⁶ or 100% of the 500-year storm.

In summary, to reduce impacts from stormwater and flooding, ORK urges the City of Pembroke to (1) consider and require an alternate site layout that increases setback buffers, (2) condition construction and occupancy on submission of a flood impact control plan, and (3) require stormwater detention ponds to retain increasingly strong storms.

3. Consider Wastewater Pretreatment and Pollutant Inventory

With the City designated as receiving wastewater from this industrial site, Pembroke's decision makers should seek clarification from the applicant and operator about its future wastewater. Being an industrial source, the contents of its wastewater could require specific actions and additional attention to prevent unintended pollution later in the treatment process. An industrial pretreatment permit⁷ may be required for this industrial waste. Additionally, the City of Pembroke would benefit from receiving an inventory of potential pollutants that could be present in the plant's wastewater stream. The information in that inventory will help to ensure Pembroke's wastewater treatment facilities continue operating as intended and does not result in fugitive industrial pollutants entering the area's waters. ORK urges the City of Pembroke to consider whether an industrial pretreatment permit is required, obtain a pollutant inventory from the plant's operators, and take necessary actions to ensure this industrial wastewater does not impact the City's wastewater treatment facilities or nearby waters.

Thank you in advance for your time and consideration; please let me know if you have any questions:
ben@ogeecheeriverkeeper.org.

Ben Kirsch, Legal Director
Ogeechee Riverkeeper

³ See Question 16 at <https://www.savannahga.gov/FAQ.aspx?QID=307>.

⁴ NOAA Atlas 14 Point Precipitation Frequency Estimates. Available at: https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=ga.

⁵ See UGA

(<https://site.extension.uga.edu/climate/2020/05/has-the-100-year-storm-changed-over-time-it-may-depend-on-where-you-are/>) and Dudek Consultants (<https://dudek.com/will-your-flood-control-system-work-in-a-100-year-event/>).

⁶ 125% of a 9.65-in storm is 12.0625 in.

⁷ <https://epd.georgia.gov/forms-permits/watershed-protection-branch-forms-permits/wastewater-permitting/industrial>