

4. Description of Wastewater Treatment Facility:

The facility consists of influent screening, an aerated pond, a facultative pond, a storage pond, an irrigation pump station, and sprayfields.

Solids settle and stabilize at the bottom of the ponds. Ponds will be dredged and dewatered sludge sent to a permitted landfill when needed.

5. Pre-treatment Plant Discharge Limitations:

5.1. Permitted design flow:

1.3 MGD

The treatment system (aerated pond + facultative pond) has a design capacity of 1.3 MGD (monthly average). The facility is not equipped to measure flow between the treatment pond and the storage pond. The flow monitoring device is located on the influent line; therefore, flow limitations in the permit apply to the influent.

5.2. BOD, TSS, and pH Limitations:

BOD: 50 mg/L; TSS: 90 mg/L; pH: 6.0 – 9.0

The proposed BOD, TSS and pH limits in the draft permit are in accordance with EPD guidelines for land application of domestic wastewater.

6. Storage Pond Monitoring:

6.1. Nitrogen Loading:

Monthly monitoring for nitrate and total Kjeldahl nitrogen for the storage pond effluent has been included in the draft permit to quantify nitrogen loading to the sprayfield and verify design assumptions.

7. Land Treatment System:

7.1. Application Rate and Wetted Area:

Treated effluent is disposed of via spray irrigation:

Crop:

Coastal Bermuda

Wetted area:

152 acres divided into 5 zones/fields