

# Citizen Request for Public Hearing – Construction Permit Regarding Allen-Harim Harbeson Facility Phase I Upgrade and Expansion Wastewater Facilities Construction Permit Application Public Comment and Public Hearing Request deadline September 24, 2015 Submitted to DNREC Division of Water, Surface Water Discharges Section

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Neighborhood landowners, concerned citizens, and several environmental citizen organizations including Protecting Our Indian River (POIR) request a Public Hearing for the proposed construction permit for Allen-Harim Harbeson Facility Upgrade and Expansion (EPA ID DE000299; State Permit No. WPCC 3131F/76).

An initial technical review of the Final Design Summary of Wastewater Treatment System Upgrade and Expansion (Phase I) dated August 21, 2015, the engineering drawings, and other documents in the public file was made by Kathy J. Martin, PE (OK#18254) at the request of the citizens. The application was received August 21, 2015. DNREC requested publication of public notice on September 2, 2015 with a close of comment period on September 17, 2015. The public comment period was extended to September 24, 2015 due to difficulties in the public obtaining a full copy of the application file.

Citizen concerns with respect to Phase 1 Upgrade and Expansion include, but are not limited to the following:

**1. Phase 1 and Phase 2 permit actions.** It is understood from the Narrative Summary that this construction permit will be for Phase I and focus on activities to “increase the hydraulic and treatment capacity of the existing wastewater treatment system”. From reading the Summary, Phase 2 activities will focus on upgrades to meet “anticipated NPDES permit discharge limits”.

- What permit process will be used to address Phase II activities?
- When will the public see the engineering designs and specifications for Phase II activities?

**2. Public Notice for this facility.** The public notice for this construction permit for Phase I was published on or around September 2, 2015. The facility has also gone out for public notice for NPDES renewal with a public comment deadline of September 25, 2015. The draft NPDES renewal permit appears to incorporate the Phase I and Phase II activities.

- The public notice for this construction permit does not mention that Allen-Harim Harbeson facility will more than double its slaughter throughput and add a second processing shift.
- The public notice for this construction permit does not mention that the wastewater discharge volume will more than double current volumes.

- How can the public comment on the draft renewal permit by September 25, 2015 when the public comment on this construction permit closes September 24, 2015 and allows for a Public Hearing?
- In response to public request for a copy of the current permit renewal application, DNREC sent a copy of the 2010 NPDES permit renewal application, the 2015 draft NPDES permit, and 2015 fact sheet. What we did not receive was a copy of the 2015 NPDES permit renewal application that includes Phase I and Phase II activities.
- In other permit file reviews, a copy of the existing permit was obtained that interestingly enough is signed and dated on September 6, 2011 but the header still reads “Effective Date: May 1, 2006; Expiration Date: April 30, 2011” and the footer still reads “Effective Date: May 1, 2006”. The permit was transferred to Allen-Harim Foods LLC in September 2011 but was not renewed. As it turns out, the permit that expired April 30, 2011 has been in effect for over four years without being renewed until now.
- Why are there separate public notices for the construction permit for Phase I and the major modification/renewal of the NPDES permit?

**3. Increased employee domestic sewage.** The expansion of the facility equates to over twice the current slaughter capacity with the addition of a second shift and what appears to be increased throughput for each of the two process shifts. The design summary does not state how many new employees will be used to fill the second shift and increase the first shift to accommodate the larger throughput. Obviously, the doubling of the employees will double the amount of sanitary/domestic wastewater.

- There are conflicting statements in the 2015 Design Summary and the existing NPDES permit (2006) with respect to whether or not the sanitary/domestic wastewater is mixed with the slaughterhouse wastewater.
- The existing permit that was issued in 2011 states “Discharge 001 consists of treated poultry process wastewater and treated stormwater”. The other three discharge outfalls are for storm water runoff. No mention is made of where the sanitary/domestic wastewater is discharged. The process schematic in the permit does not show the treatment system for sanitary/domestic wastewater nor its disposition.
- Page 2 of the 2015 Design Summary states the domestic wastewater from the package plant will be “disinfected and discharged to mix with the treated process wastewater prior to discharge through the 001 outfall.”
- The proposed draft permit has the same description for Discharge 001 as the existing NPDES permit and does not mention sanitary/domestic wastewater generated by the employees Discharge 001. However, the new schematic in the draft permit does show the package treatment plant for sanitary/domestic wastewater.

**4. Condition of the existing waste treatment system.** The construction permit application and Design Summary do not include discussion of the deplorable conditions of portions of the existing wastewater treatment system. There is no real discussion of

how the closure of existing treatment systems will be accomplished. The documents are silent with respect to determining whether or not the shallow groundwater has been contaminated even though the surrounding groundwater wells are completed to depths less than 100 feet and many as shallow as 65 feet and the west lagoons show signs of liner failure.

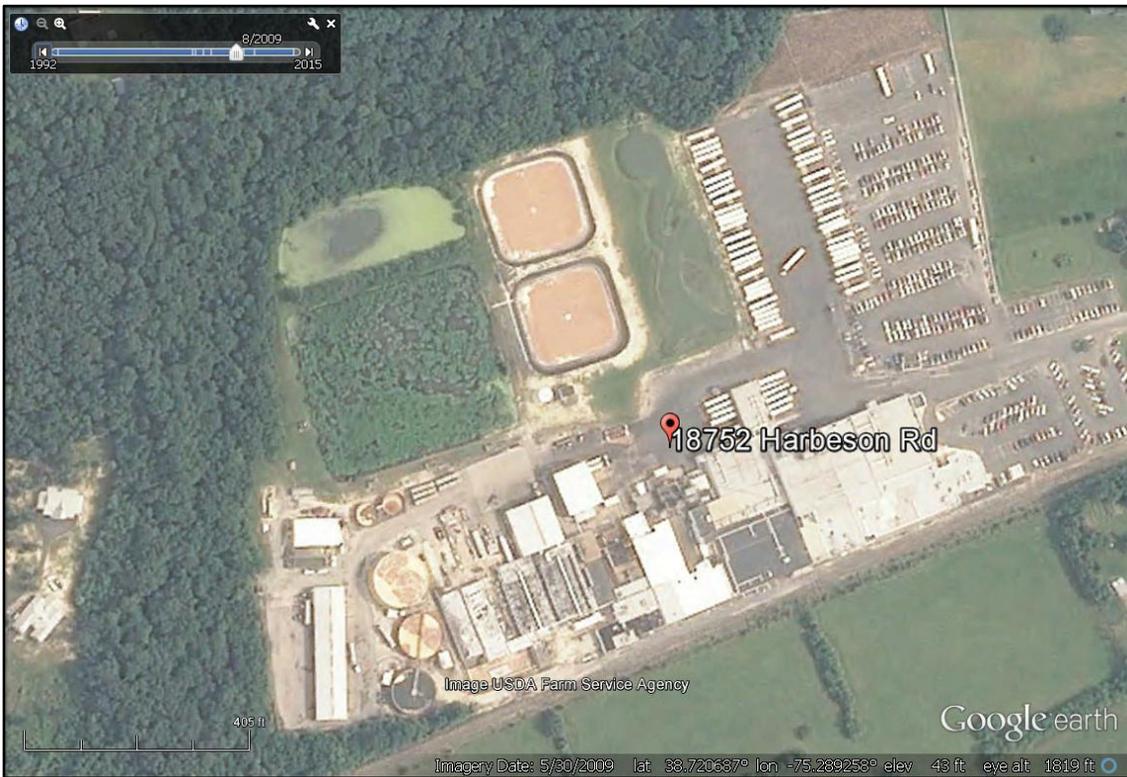
- How will DNREC determine whether or not the existing wastewater treatment system has contaminated shallow groundwater?
- Is the plastic liner in the west lagoon intact after it has been floating (whaling) for several years (see Figures 4, 5, and 6)?
- How will the new wastewater treatment system improve the conditions of the west lagoons with respect to vegetation and plastic liner integrity?
- Under what conditions would the facility have a peak flow rate of 4.0 million gallons per day as shown on page 4 of the Design Summary?
- Where are the laboratory results used to generate the screened raw wastewater pollutant concentrations and loading in Table 1 of the Summary?
- Why doesn't Table 1 include information about pathogens?
- In the engineering drawings, the large west lagoon is labeled "abandoned anaerobic lagoon" – Why is this lagoon allowed to remain "abandoned" without being properly closed including determination of subsurface contamination via groundwater monitoring?



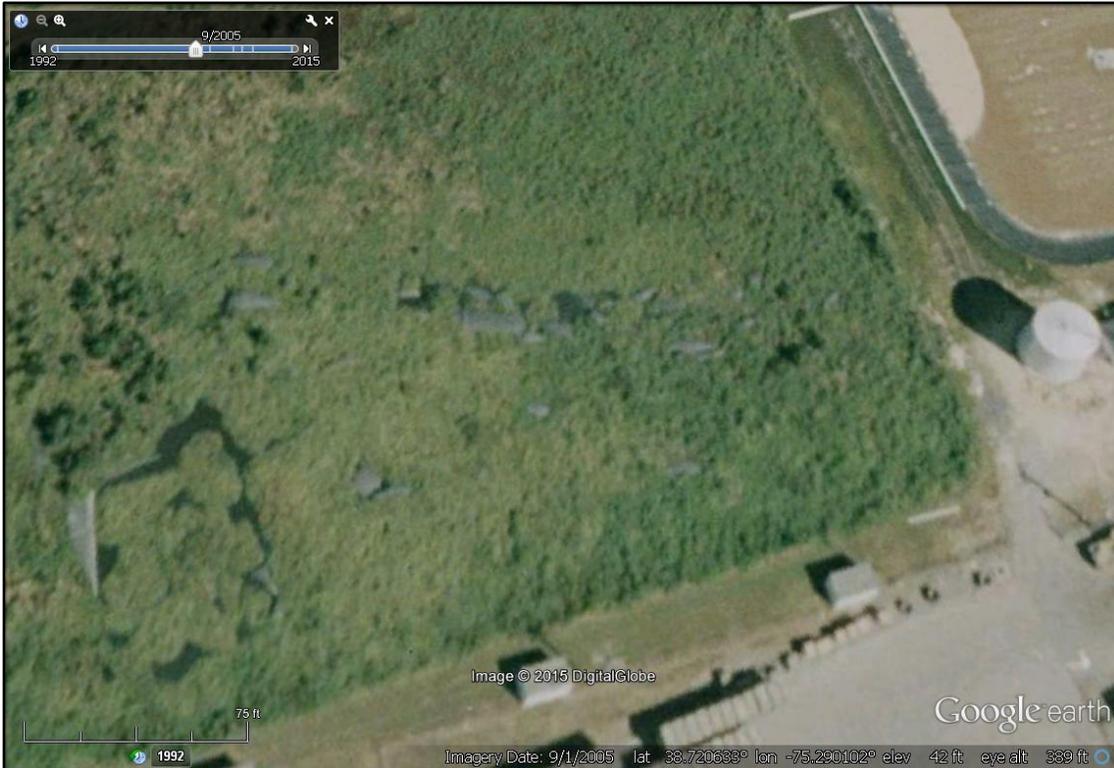
**Figure 1** – Allen Family Foods poultry slaughter facility in 1992 showing three lagoons.



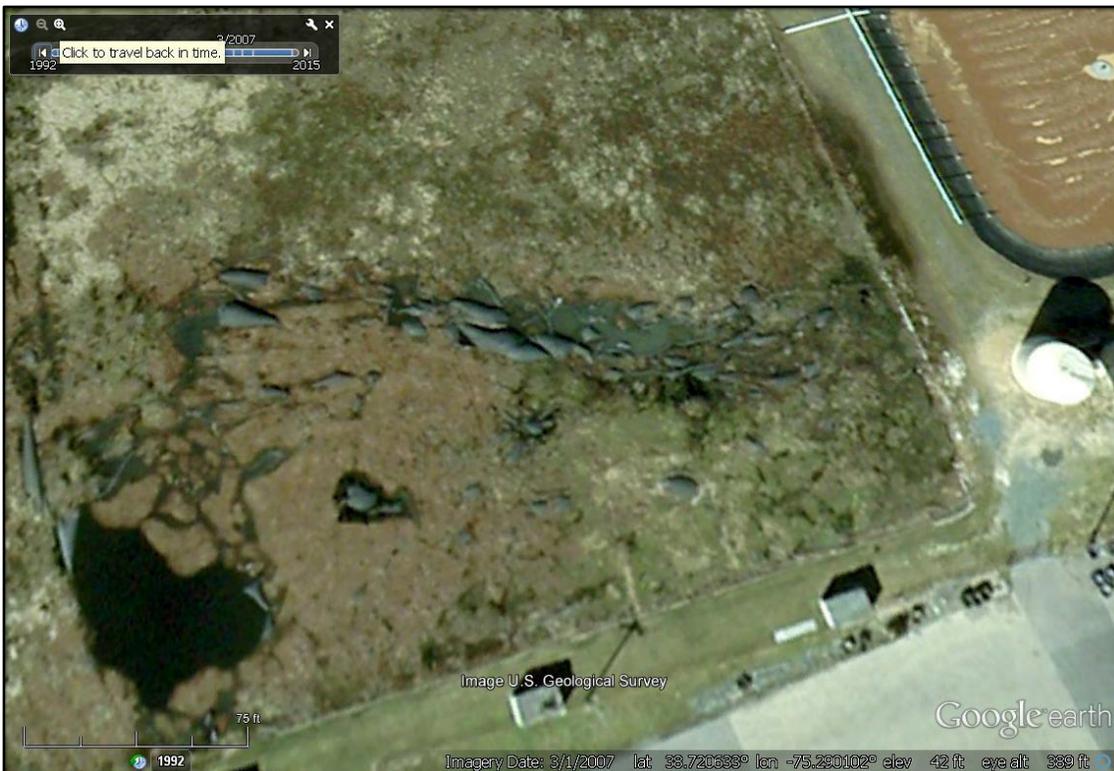
**Figure 2** – Facility in 2007 showing extreme vegetation in west lagoons and new wastewater treatment system in place of the larger east lagoon.



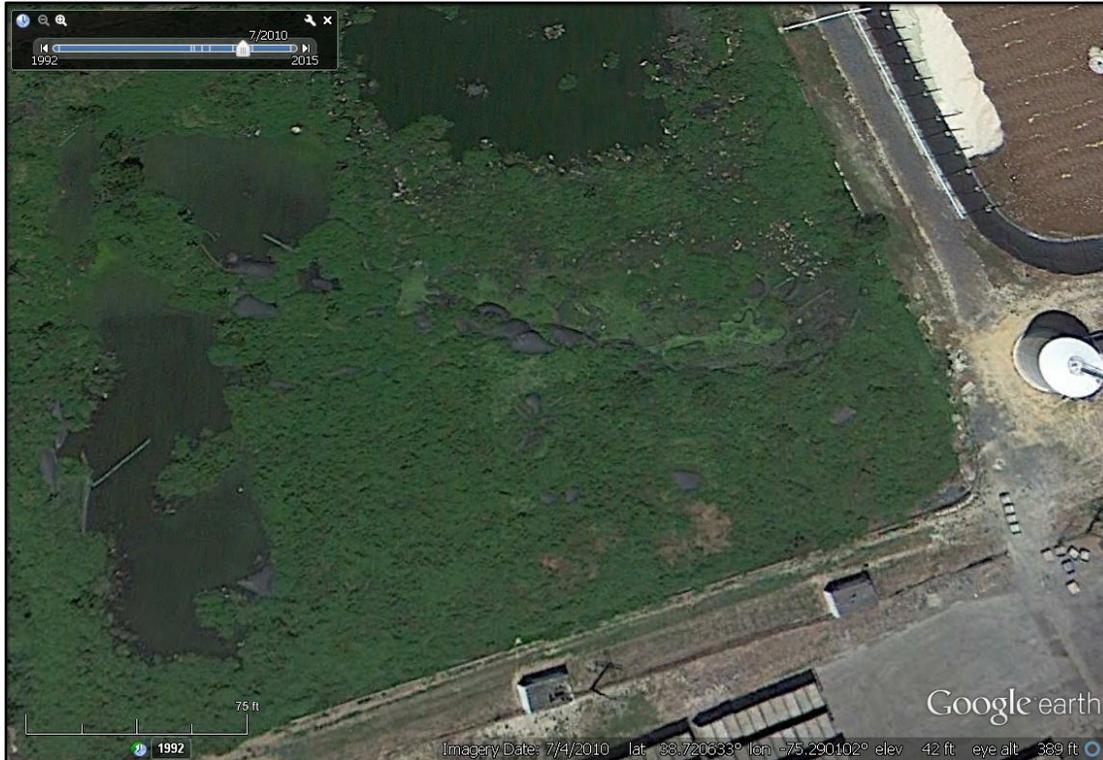
**Figure 3** – Facility in 2009 showing extreme vegetation and algae in west lagoons.



**Figure 4** – Close-up of southwest lagoon in 2005 showing extreme vegetation and floating plastic liner.



**Figure 5** – Close-up of southwest lagoon in 2007 showing floating plastic liner.



**Figure 6** – Close-up of southwest lagoon in 2010 showing vegetation and floating plastic liner.

**6. Problems with effluent discharge concentrations with existing system.** The existing wastewater treatment system has had problems for many years both before the facility was purchased by Harim and after.

- How will the Phase I changes to the wastewater treatment system prevent the effluent violations that were documented in the past few years?

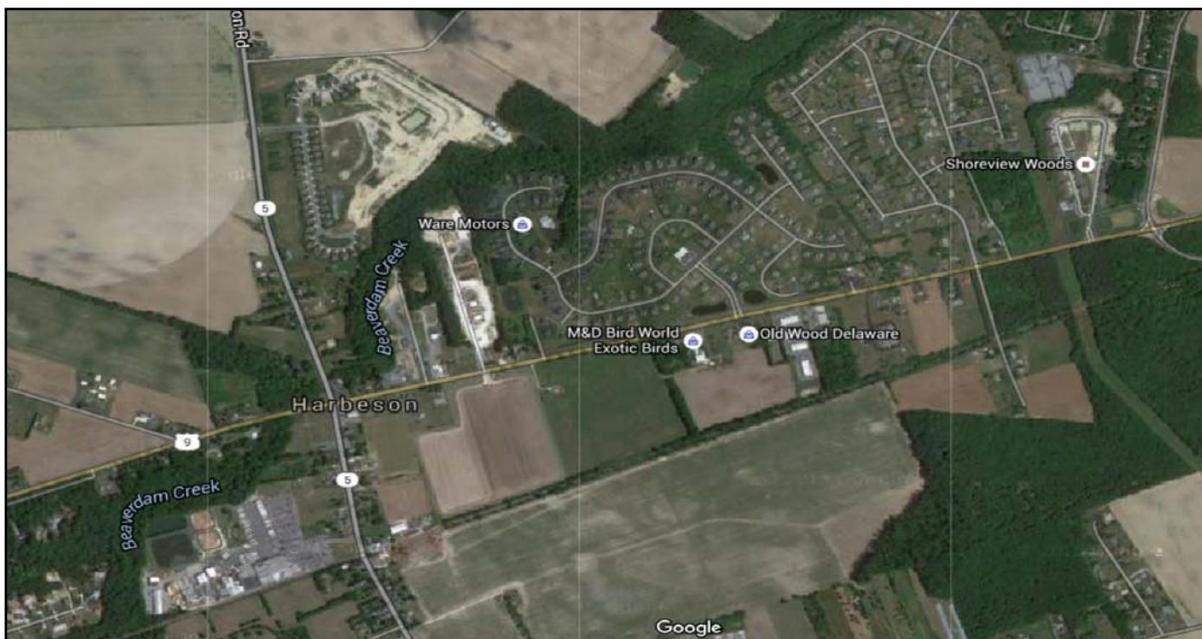
“Five Day Letters” from Michael Sausé, Wastewater Manager for Allen-Harim, regarding discharge concentration exceedance at various Outfalls included error with respect to permitted effluent limitations as follows:

- **June 2013** the stormwater discharge from Outfall 003 contained Total Suspended Solids (TSS) of 674 mg/l and *Fecal Enterococcus* of 1,732,870 col/100 mls. The rationale for the high values was that the stormwater was not diverted to the treatment plant. What was not discussed was why the fecal concentration was so high from only 20% of the stormwater flow from “the truck parking and live holding shed area”.
  - o The effluent limitation for Outfall 003 in the permit at the time was 30.0 mg/l daily maximum for TSS, so the discharge concentration was over 22 times larger than allowed by the permit.
  - o The effluent limitation for Outfall 003 in the permit at the time was 185 col/100 ml for *Enterococcus*, so the discharge concentration was over 9,366 times larger than allowed by the permit.

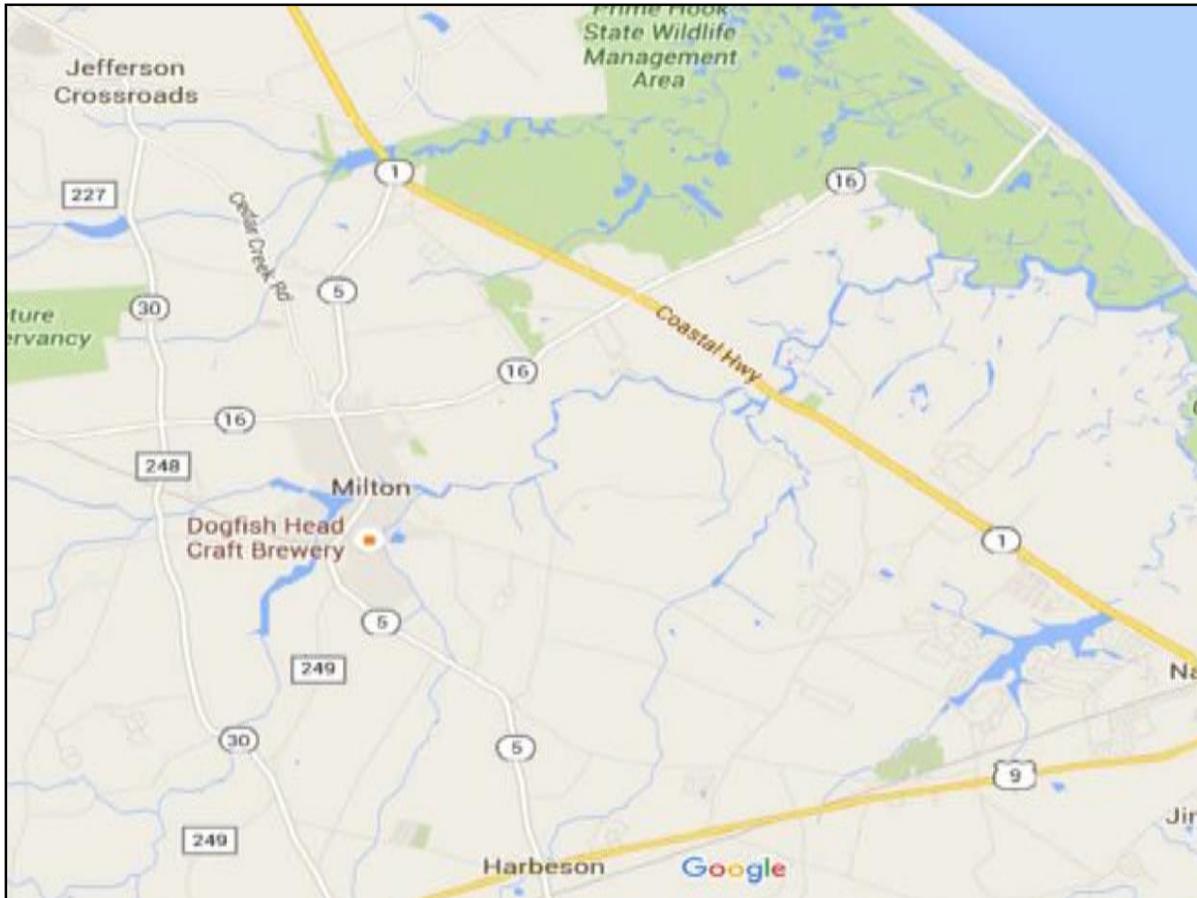
- **October 2012** the treated wastewater discharge from Outfall 001 contained 18.9 lbs/day total phosphorus (monthly average). The rationale for the high value was a “plug in the aluminum chloride feed line” that was then fixed.
  - o The effluent limitation for Outfall 001 in the permit at the time lists a total phosphorus limit of 3 lbs/day daily maximum, not a monthly average.
  - o The discharge was over 6 times the permitted concentration.
- **September 2012** the treated wastewater discharge from Outfall 001 contained up to 44.38 lbs/day daily maximum. The rationale for the high values was “in house laboratory testing on grab samples indicated slightly elevated Phosphorus results but within compliance limits.” The letter referred to a daily maximum of 23 lbs/day for phosphorus, however that is incorrect.
  - o The permit at the time had a daily maximum of 3.0 lbs/day. The value of 23 lbs/day is for BOD5 and Total Suspended Solids.
- **August 2012** the stormwater discharge from Outfall 003 contained 474.0 mg/l Total Suspended Solids. The rationale for the high value was the pump had stopped working.
  - o The permit at the time had a daily maximum of 23.0 mg/l TSS.
  - o The discharge was 20 times the permitted concentration.

Other concerns citizens have with the proposed construction of Phase I include:

- adverse impacts to surface water that flows past several residential neighborhoods and church properties,
- shallow groundwater used as private and public water supply in numerous wells close to the facility,
- adverse impacts that a catastrophic upset could cause on downstream users of surface water, such as Beaverdam Creek as shown in the following maps:



**Figure 7** – Beaverdam Creek flowing from facility to north side of large housing area.



**Figure 8** – Google Map showing Beaverdam Creek flowing north and east from Harbeson to the confluence west of Coastal Highway 1 and then through the State Wildlife Management Area to Delaware Bay.

**7. Flowrate of 2 million gallons per day for expanded facility.** The Design Summary and calculations are based on a design flowrate of 2 million gallons per day that appears to be determined using an assumption of 5 gallons of wastewater per bird processed.<sup>1</sup>

- The existing plant is described as “6.0 to 7.0 gallons wastewater/bird”. The proposed expansion of 2.24 times the existing throughput is described as “5 gallons per wastewater/bird”. Why will the proposed expansion generate less wastewater per bird?
- The value of 2 million gallons is determined by multiplying 5 gallons of wastewater per bird times 393,000 birds per day (new throughput capacity).<sup>2</sup>
- How much wastewater is allowed to seep into the ground from the west lagoon (abandoned anaerobic lagoon)?
- How does DNREC perform a water balance on the facility to determine whether or not seepage to groundwater has occurred all of the lagoons?

<sup>1</sup> See page 3 of Design Summary, Item 3(a)(2) and Item 3(b)(1).

<sup>2</sup> See page 3 of Design Summary, Item 3(b)(1).

**8. Abandoned lagoons, buildings, and other wastewater treatment systems.** The engineering drawings indicate that several buildings and treatment systems will be removed during the Phase I upgrade. The construction permit application project summary lists the activities for Phase I and Phase II.

- The activities for Phase I are Items 1 through 9 and Phase II are Items 10 – 16 (per Project Summary).
- Phase I includes the following new treatment structures: Flow Equalization Basin, Final Clarifier #2, UV disinfection system tank, Nitrification Reactor #2B tank, Anoxic Reactor #3 tank, Aerobic Reactor #4 tank, retrofitting CMAS #2 into new Waste Sludge Storage Tank #3, and Tertiary Sand Filters.
- Phase I activities includes the removal of several structures that are not included in the permit application narrative but is shown on various engineering drawings including the Live Haul Shed. Why isn't there a list of the structures that will be removed so the public and DNREC can keep track?
- The application materials are silent about what will be done with the "abandoned anaerobic lagoon".
- Will there be contaminated soil under the Live Haul Shed and what will be done with that after the shed is removed?

The following citizens request a Public Hearing on the Allen-Harim Harbeson Phase I Construction Permit to express these and other concerns to DNREC and to learn how the construction permit will protect human health and the environment.

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