

Demay, Ina

From: Gormly, Adam
Sent: Thursday, October 26, 2017 12:18 PM
To: Hummel, Christina; Demay, Ina
Cc: Cassady, George; Budke, Donna; Hagwood, Deborah; Moreda, Joe; Hiznay, Tom; Lundgren, Johanna
Subject: FW: SU 17-0510 Comments
Attachments: 17-1025_Special Use Application SU17-0510.pdf

Please include the attached review comments in the record for SU 17-0510. Please note, the actual review comments have not changed from those previously submitted, only a cover memo was added.

Thank you

From: Cassady, George
Sent: Wednesday, October 25, 2017 5:44 PM
To: Gormly, Adam <Gormlya@HillsboroughCounty.ORG>; Garsys, Lucia <GarsysL@HillsboroughCounty.ORG>; Pinol, Sandra <Pinols@HillsboroughCounty.ORG>
Subject: SU 17-0510 Comments

Please see attached.



PUBLIC UTILITIES

PO Box 1110 Tampa, FL 33601-1110

MEMORANDUM

DATE: October 25, 2017

TO: Adam Gormly, Director, Development Services

FROM: George Cassady, Director, Public Utilities

SUBJECT: Special Use Application SU 17-0510

**CHIEF DEVELOPMENT &
INFRASTRUCTURE SERVICES
ADMINISTRATOR**

Lucia E. Garsys

Public Utilities Department has reviewed the October 10th submittal for the Special Use Application SU 17-0510, consisting of the applicant's *Revised Narrative Description* and the *Environmental Assessment For A Special Use Project* report dated September 2017 and signed September 1, 2017, in conjunction with the *Preliminary Design Report and Engineering Report* received by the County on May 23, 2017. Detailed comments of the review are attached.

We believe that the engineering and operational information provided is insufficient to thoroughly evaluate the impacts to the site and the surrounding properties. However, where technical information is provided we have concerns with its technical sufficiency to support the special use application for a wastewater treatment facility.

The uniqueness of the application, the lack of adequate materials submitted to support the application and permitting roles of regulatory agencies have posed a challenge to our ability to thoroughly evaluate the proposed use. Given the information provided we have evaluated it to the best of our ability but believe that further detail is required for the applicant to demonstrate that the proposed facility will not have negative operational and environmental impacts. Should the applicant provide additional information we will be happy to review.

Attachment

c: Lucia E. Garsys, Chief Administrator, Development and Infrastructure Services

Special Use Application SU 17-0510 (October 10, 2017)

Public Utilities Department has reviewed the Narrative Description dated October 10, 2017, along with supporting documents (Environmental Assessment and Preliminary Design and Engineering Plan), here are our findings:

1. The applicant did not provide an overall treatment plant design or facility layout, therefore elements of the facility that will control odors and noise could not be reviewed or evaluated.
2. Engineers Certification provided by the applicant is simply a signed and sealed portion of the review criteria from Section 6.11.102 of the LDC, and therefore fails to provide information to assess whether odors and noise will be adequately mitigated. There are no engineering details to review at this time.
3. The applicant states that the operation will not produce significant odors, however, specific control measures have not been identified or detailed to demonstrate how odors will be managed or controlled. In our experience, septage and related wastes will generate considerable odors both organic and inorganic in nature. Odors such as H₂S (hydrogen sulfide, rotten egg smell), organic based amines (rotten fish), organic indoles and skatoles (skunk smell) are to be expected. In our experience lime is not used to control odorous air emissions and therefore does not appear to be a reasonable control method. Lime could be used to treat the solids portion of the process but clearly cannot be used to treat air emissions. In addition, the applicant proposes a 6-foot fence and landscaped perimeter to mitigate and control odors. Our experience with fencing and landscaping is that it does NOT provide effective odor control for wastewater treatment operations.
4. The Engineering report provides a waste strength characterization for the septage, grease, and portable toilet waste combination. The stated CDOD (range of 600-800 mg/l) and TSS (range of 300-500 mg/l) is far below the expected concentrations for this type of waste stream. In our experience the concentration of septage alone can be 20-30 times the strength of domestic (residential) wastewater. The EPA handbook on septage treatment (EPA-625/6-84-009) indicates that average concentrations of 6,500 mg/l can be expected as well as a TSS of 12,800 mg/l. This information is extremely important when sizing the process units to ensure adequate capacity and treatment.
5. Portable toilet waste, or "blue wastes" are included with the waste stream as a 10% component. The blue additive used in port-o-lets, RV's and waste holding tanks is typically a strong oxidizer with a deodorant component. By nature the blue wastes are biocidal, typically containing quaternary ammonia, formaldehyde, and dichlorobenzene. Our immediate concern is that the portable toilet waste will be problematic to treat in a biological based process. Since the blue additives are used as a disinfectant in their application to portable toilets, the same result can be expected from the addition to the wastewater treatment process.
6. Environmental Impacts and Protections. Considerable discussion is provided in the narrative relating to set backs, site characteristics, proximity to wetlands and protective buffers. However, there is no real evidence provided that the operation will not have a negative environmental impact to the surrounding properties and development. The applicant identifies

the need to complete a subsurface study that will establish soil composition, groundwater flow direction, and soil infiltration rates; without this information we are unable to evaluate whether the safeguards proposed by the applicant will be sufficient to protect area wetlands and waterways from being impacted by the treated effluent.

7. Comparing the submittals of May 23rd and the most recent revision of October 10th, there are considerable differences in the handling of biosolids. The original submittal characterized the biosolids material as a "Milorganite" quality product, and the October revision states that biosolids will be transported to a landfill for disposal. Both statements are problematic. It was highly unlikely a high quality by-product such as Milorganite could be achieved given the described treatment process, and trucking dewatered solids to the landfill has inherent handling problems including odors. As such, the revised narrative does not give reasonable assurance that solids disposal can be handled without nuisance odors generation.