

Exhibit 26C-Avoyelles Parish Port-Sewer Capacity Estimate

Avoyelles Parish Port-Sewer Capacity Estimate

From: [Samuel maddie](#)
To: [Jonathan Dean](#)
Subject: Fw: Cost Estimate for Wastewater Treatment Plant
Date: Wednesday, May 04, 2016 3:03:00 PM
Attachments: [Port of Avoyelles WWTP Prelim Cost Est Feb2016.pdf](#)

On Wednesday, February 24, 2016 7:56 AM, Samuel maddie <stmaddie14@yahoo.com> wrote:

Good Morning Gentlemen
Please look over and give me your thoughts
Thanks Tommy

On Tuesday, February 23, 2016 4:52 PM, "Turner, Glenn" <Glenn.Turner@MMLH.com> wrote:

Mr. Maddie,

The Port's website had one email address for you and your business card had another one; hence the shotgun approach of sending this to both email addresses. We have prepared preliminary cost estimates for three alternatives for a wastewater treatment facility to serve the Port of Avoyelles site. We understand that you desire to ultimately have a minimum of 250,000 gallons per day of wastewater treatment capacity available to make the site more marketable for potential development.

- Alternative A is a 250,000 gal/day package plant that takes up ½ acre with a total cost of \$2.3M.
- Alternative B is a 100,000 gal/day package plant that takes up ¼ acre with a total cost of \$1.15M
- Alternative C is a 250,000 gal/day Lemna system that takes up 5 acres with a total cost of \$1.2M

The cost estimates are for full project costs and include a terminal lift station, effluent lift station, force main connecting to the Town of Simmesport's effluent pipe, and typical engineering, permitting, surveying, and legal fees as if being funded through USDA/RD or DEQ-CWSRF. The fees will vary according to funding agency requirements and are intended to be on the higher end of the range to be conservative, since the funding agency has not yet been determined.

The package plants in Alternatives A and B are composed of modular precast concrete units, with different numbers of modules. Therefore, one could install the 100,000 gpd plant to begin with and then expand it to a larger size at a later date by adding more units.

The least costly alternative is the Lemna system, which consists of an aerated lagoon followed by a covered lagoon. The Lemna system also typically requires less energy and O&M than an activated sludge type system. However, the Lemna system also requires the most land. During our meeting, you expressed a desire to not use any more of the Port's

available land than necessary. The last page of the attachment shows a prospective location for the wastewater treatment plant that we have identified on the port property. This is likely the least marketable part of the port's property because of its location between the property line and the bayou and because of its relatively low elevation compared to the remainder of the property. The soils map shows higher clay soils farther away from the River, which is better suited to constructing wastewater lagoons. The soils closer to the river even seem to be suitable for wastewater lagoons as well. We received the soil borings reports for the elevated tank from GTL and those show some clay layers that could be compacted into a lagoon liner.

The cost for the wastewater force main would be roughly the same regardless of the treatment plant location. Ultimately, wastewater needs to move from the center of the port site, through a treatment plant, thence to Simmesport's effluent force main north of the port site. The cost of 6" pipe is the same, whether one is pumping untreated or treated wastewater. During our meeting, you mentioned the possibility of locating the treatment plant at the former school site. There are approximately 2 acres of land available there outside the fence. One could install either of the package plant alternatives on that site. However, we are nervous that the neighbors may complain about noise from the blowers and occasional odors from the treatment plant.

Please note that this is preliminary in nature and is intended to show a few options. Please let us know if you particularly like or dislike any of these alternatives and we will get with Mr. Magee regarding funding. Please let me or Jeremy know if you need any additional information.

Thanks,

Glenn

Glenn A Turner PE

