

TO: GCSB Board of Directors

FROM: Peter Kampa, General Manager

DATE: November 13, 2018

SUBJECT: Agenda Item 6 G: Consideration of the Process and Schedule for Evaluation of Options and Implementation of Potential Solutions for Odor Control Related to the District Wastewater System

RECOMMENDED ACTION

Update only, no board policy action required at this time

BACKGROUND

The District received a public complaint at the recent Special Board meeting regarding foul odors reportedly emanating from Lift Station #7 (LS 7) on Tannahill Drive in PML, and the Board requested that this item be placed on the agenda for discussion.

District staff performs routine maintenance on the sewer system to ensure the continued functionality of the system, and also responds to service work orders for issues such as leaks, sewer plugs and sewer odors. Over the years, sewage related odors have been reported in various locations throughout the sewer system, and from the wastewater treatment plant itself. Staff typically responds to such odor complaints, and inspects for problems with operations, and conducts maintenance if necessary and problems are determined to be contributing to sewer odors. Service orders are generated by customer calls or emails to the office. District staff does not monitor social media posts to determine if service orders need to be generated.

Concerns regarding sewer odor causing health effects has not been previously reported or claimed to the District. There have been recent complaints logged on social media regarding sewer odor near LS #7, but very few complaints actually given to the office over the past two years. In 2017 we responded to two odor related service calls after hours, and in 2018 we have responded to two odor related service calls, one of which was for Lift Station #6. We don't monitor social media, and encourage all customers to call the office, stop by or email. The number of service calls is provided in response to the complaint at the Board meeting and subsequently on social media alleging that the sewer odor was a "serious health hazard" to which the District was not paying attention or responding. We responded to each prior service call.

As we discussed, LS #7 is the location where all other district sewer lift stations in PML empty prior to being pumped to the Wastewater Treatment Plant at the CSD office. Odors in sewer systems are common and constant, and there are many factors including

the location, level and nature of the odors that affect whether their odor is detected by customers or not.

Operating factors greatly affect odor, including weather, temperature, rainwater infiltration, type of sewage, detention times, amount of flow, storage in the lift station wet well, size of mains and amount of stored gasses in the mains, design of the lift station wet well, level of maintenance and other engineering factors. We have 16 lift stations in the system; which equates to one lift station for every 100 customers. By comparison, the City of Modesto has 2677 customers paying for and contributing flushing water to every lift station on average. Their lift stations stay clean and much more odor free from frequent pumping and volume of flushing/clean water to sewage.

In order to determine whether an excessive amount of sewer odor is being produced from the sewer system in any location, we must employ the services of our District engineer and potentially an outside consulting firm specializing in determining the source of sewer gas odors (typically methane and hydrogen sulfide). The consultant will evaluate and determine the source and levels of sewer gas production, and our engineer will evaluate and propose the most cost effective solution to the problem, if one exists. The cost of this evaluation and planning/design study is unknown at this time, and Board approval will be considered once a proposal has been received.

Starting this week, we are increasing the frequency of inspection and maintenance of the LS #7 site, to determine if this will reduce odors. Please note that LS #7 is located less than ½ mile from the wastewater plant, which could also be the source of odors in the area at certain times of the day.

ATTACHMENTS

None

FINANCIAL IMPACTS

An engineering effort of up to 40 hours, or \$5000 is estimated to identify local consultants to evaluate sewer gas production and develop the consultant scope of work and cost estimate. This amount does not include the actual cost of the gas evaluation.