STAFF REPORT

TO: Sewerage Agency of Southern Marin Commissioners

FROM: Mark Grushayev, Wastewater Treatment Manager

SUBJECT: Recent Community Concerns About the WWTP Emissions

DATE: October 18, 2018

ISSUE
Emissions from the WWTP

BACKGROUND
During the week of September 10, 2018, SASM staff and some Board members received several emails from a concerned parent of a Mill Valley Middle School (MVMS) student about emissions released from the WWTP. The parent alleged exposure of students to toxic pollutants. This parent also forwarded emails to the Bay Area Air Quality Management District (BAAQMD), the Marin Independent Journal (IJ), some City and County officials, among other recipients. The SASM Board acknowledged these complaints on September 20th and directed staff to evaluate plant emissions and report findings to the Board.

DISCUSSION
The emails contained numerous allegations and criticized, a 2016 study conducted by Webster Environmental on emissions from the SASM WWTP. The content of these emails was disseminated in the social media, specifically “Next Door”, causing concerns among other parents and community members.

Following these allegations, the IJ published an article “Mill Valley sewage plant stench agitates students, parents” on September 23 and updated on September 25, 2018.

On September 24, the WWTP was visited by a reporter from Channel 5 News, followed by TV coverage on the 6 pm “News” the same day. As mentioned in the article, BAAQMD staff stated that initial testing found the WWTP to be in compliance with no emissions violations.

During the past several weeks both WWTP and BAAQMD staff have inspected the WWTP facilities and performed various measurements. WWTP staff primarily measured for the presence of hydrogen sulfide (H2S) using a special BAAQMD specified meter. BAAQMD staff measured...
for H2S and various volatile organic compounds (VOC) around the plant and along the facade of the MVMS buildings using a number of methods and various equipment.

The BAAQMD requested that SASM rent a special meter that can detect very small concentrations of VOCs and that we begin regular testing around the facilities. Staff has complied with this request and has been recording measurements of VOCs and H2S outside and inside the WWTP, since September 27, 2018. The readings from both meters typically show either zero or very low concentrations, that are well below the allowable threshold. The allowable thresholds for the majority of compounds are in the parts per million range, and the specified equipment is recording measurements in the parts per billion (ppb) range. In general, this means that our measurements are approximately 1,000 times less than the allowable thresholds.

The BAAQMD conducted additional sampling outside of the WWTP on October 1, using a special source test van. The testing was performed during normal operations and also during extended hours while the dewatering process was performed. On October 3, the WWTP was again inspected by BAAQMD staff. Samples of the digester gases were also collected for further analysis and evaluation. BAAQMD staff has not yet issued a report of its findings, or notified staff of any emissions violations or health/safety concerns.

On October 11, 2018 the WWT Manager and the Director of Public Works attended the Mill Valley School District’s (MVSD) board meeting and presented an overview of SASM and reported on the progress of the WWTP construction project. Staff provided information on the emissions testing and findings and a potential schedule for installation of the new air scrubber, pending BAAQMD review and permission.

Mr. Wayne Kino, the Deputy Air Pollution Control Officer from BAAQMD Executive Office, also provided an update on the investigation of the complaints about the emissions around the MVMS.

Mr. Kino provided an overview on the BAAQMD functions, standards and approach to investigation of complaints. He stated that the investigation at this point, only detected very low concentrations of the H2S and other potentially dangerous compounds. He noted there is no indication that these compounds are a concern for the health of the MVMS students or the general public. Mr. Kino also acknowledged that both the WWTP and MVMS were built on a former landfill site, close to a marsh and adjacent to vehicular traffic congestion which all give off emissions. Mr. Kino noted that they found higher levels than expected of Methyl Ethyl Ketone (MEK) and acetone, but they have not confirmed the source of these compounds and noted that the levels were acceptable, but higher than expected, so they wanted to determine the source and minimize or eliminate if feasible. He stated that additional testing will be performed in the near future to confirm that sources of the emissions are identified properly.
There was one public comment on the topic at the School Board Meeting. The commenter acknowledged her belief that the emissions were compliant with regulations and trusting that BAAQMD and SASM staff were doing the best they could, given the circumstances with the adjacent land uses. Her comment was generally directed at the various stakeholders acknowledging that the odor is a distraction perhaps making it more difficult for students and teachers to concentrate and sought that a joint Task Force be initiated to help develop ideas such as procurement and use of fans while windows are closed, modification of plant hours, etc. be developed to help improve the situation. Staff noted their willingness to participate and help with such as task force if the School chooses to put one together.

In a separate meeting with staff, Mr. Kino also acknowledged that BAAQMD received an application from SASM to replace the emergency generators and the odor control system which will require a thorough review process before issuing the Authority to Construct Permit. Mr. Kino noted that the issuance of a permit for this type of facility requires a health risk assessment and either 30 or 60 days public noticing. Because of the required sequence of events, it is unlikely that SASM will be able to accelerate implementation of the odor control system by the end of 2018. Although we had hoped to significantly accelerate the installation of the new system, (by as much as 6-8 months), to address community concerns, the reality is that there are no health or safety issues related to SASM’s emissions and the initial implementation schedule is acceptable. The BAAQMD has not provided a specific timeline of when SASM can expect a report of their findings.

Staff will continue to work with BAAQMD staff, the consulting and construction team to ensure compliance with the various regulations, and to communicate updates to the community. Staff does not anticipate a significant change in status prior to the November SASM Board meeting. Staff plans to incorporate this emissions topic into the Master Plan Phase 1 Implementation Project monthly updates that are already provided in the monthly manager’s report.

RECOMMENDATION
Receive report and provide direction as necessary.