

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

1 **ISSUE**

2 Emissions from the WWTP
3

4 **BACKGROUND**

5 During the week of September 10, 2018, SASM staff and some Board members received several
6 emails from a concerned parent of a Mill Valley Middle School (MVMS) student about emissions
7 released from the WWTP. The parent alleged exposure of students to toxic pollutants. This parent
8 also forwarded emails to the Bay Area Air Quality Management District (BAAQMD), the Marin
9 Independent Journal (IJ), some City and County officials, among other recipients. The SASM
10 Board acknowledged these complaints on September 20th and directed staff to evaluate plant
11 emissions and report findings to the Board.
12

13 **DISCUSSION**

14 The emails contained numerous allegations and criticized, a 2016 study conducted by Webster
15 Environmental on emissions from the SASM WWTP. The content of these emails was
16 disseminated in the social media, specifically “Next Door”, causing concerns among other parents
17 and community members.
18

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

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

25 During the past several weeks both WWTP and BAAQMD staff have inspected the WWTP
26 facilities and performed various measurements. WWTP staff primarily measured for the presence
27 of hydrogen sulfide (H₂S) using a special BAAQMD specified meter. BAAQMD staff measured

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28 for H₂S and various volatile organic compounds (VOC) around the plant and along the facade of
29 the MVMS buildings using a number of methods and various equipment.
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31 The BAAQMD requested that SASM rent a special meter that can detect very small concentrations
32 of VOCs and that we begin regular testing around the facilities. Staff has complied with this request
33 and has been recording measurements of VOCs and H₂S outside and inside the WWTP, since
34 September 27, 2018. The readings from both meters typically shows either zero or very low
35 concentrations, that are well below the allowable threshold. The allowable thresholds for the
36 majority of compounds are in the parts per million range, and the specified equipment is recording
37 measurements in the parts per billion (ppb) range. In general, this means that our measurements
38 are approximately 1,000 times less than the allowable thresholds.
39

40 The BAAQMD conducted additional sampling outside of the WWTP on October 1, using a special
41 source test van. The testing was performed during normal operations and also during extended
42 hours while the dewatering process was performed. On October 3, the WWTP was again inspected
43 by BAAQMD staff. Samples of the digester gases were also collected for further analysis and
44 evaluation. BAAQMD staff has not yet issued a report of its findings, or notified staff of any
45 emissions violations or health/safety concerns.
46

47 On October 11, 2018 the WWT Manager and the Director of Public Works attended the Mill
48 Valley School District's (MVSD) board meeting and presented an overview of SASM and reported
49 on the progress of the WWTP construction project. Staff provided information on the emissions
50 testing and findings and a potential schedule for installation of the new air scrubber, pending
51 BAAQMD review and permission.
52

53 Mr. Wayne Kino, the Deputy Air Pollution Control Officer from BAAQMD Executive Office,
54 also provided an update on the investigation of the complaints about the emissions around the
55 MVMS.
56

57 Mr. Kino provided an overview on the BAAQMD functions, standards and approach to
58 investigation of complaints. He stated that the investigation at this point, only detected very low
59 concentrations of the H₂S and other potentially dangerous compounds. He noted there is no
60 indication that these compounds are a concern for the health of the MVMS students or the general
61 public. Mr. Kino also acknowledged that both the WWTP and MVMS were built on a former
62 landfill site, close to a marsh and adjacent to vehicular traffic congestion which all give off
63 emissions. Mr. Kino noted that they found higher levels than expected of Methyl Ethyl Ketone
64 (MEK) and acetone, but they have not confirmed the source of these compounds and noted that
65 the levels were acceptable, but higher than expected, so they wanted to determine the source and
66 minimize or eliminate if feasible. He stated that additional testing will be performed in the near
67 future to confirm that sources of the emissions are identified properly.
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69 There was one public comment on the topic at the School Board Meeting. The commenter
70 acknowledged her belief that that the emissions were compliant with regulations and trusting that
71 BAAQMD and SASM staff were doing the best they could, given the circumstances with the
72 adjacent land uses. Her comment was generally directed at the various stakeholders
73 acknowledging that the odor is a distraction perhaps making it more difficult for students and
74 teachers to concentrate and sought that a joint Task Force be initiated to help develop ideas such
75 as procurement and use of fans while windows are closed, modification of plant hours, etc. be
76 developed to help improve the situation. Staff noted their willingness to participate and help with
77 such as task force if the School chooses to put one together.
78

79 In a separate meeting with staff, Mr. Kino also acknowledged that BAAQMD received an
80 application from SASM to replace the emergency generators and the odor control system which
81 will require a thorough review process before issuing the Authority to Construct Permit. Mr. Kino
82 noted that the issuance of a permit for this type of facility requires a health risk assessment and
83 either 30 or 60 days public noticing. Because of the required sequence of events, it is unlikely that
84 SASM will be able to accelerate implementation of the odor control system by the end of 2018.
85 Although we had hoped to significantly accelerate the installation of the new system, (by as much
86 as 6-8 months), to address community concerns, the reality is that there are no health or safety
87 issues related to SASM's emissions and the initial implementation schedule is acceptable. The
88 BAAQMD has not provided a specific timeline of when SASM can expect a report of their
89 findings.
90

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

97 Receive report and provide direction as necessary.
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