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MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

May 9, 2018

Mr. Fidel Alas
Board President
Palo Alto Park Mutual Water Company
2190 Addison Avenue
East Palo Alto, CA 94303

Dear Mr. Alas:

OPERATION & MANAGEMENT OF THE PAPMWC WATER SYSTEM
Palo Alto Park Mutual Water Company, Water System No. 4110020

This letter is a follow-up to the conference call on April 30, 2018 in which the Division of Drinking Water (Division) expressed significant concerns regarding the accuracy of the daily operation reports; the monitoring, recording and notification of the treatment system; and the operation and management of the Palo Alto Park Mutual Water Company (PAPMWC). Ms. Van Tsang and I of the Division had the call with Ms. Katherine Loudd, Ms. Niambi Lincoln and Mr. Mike Freitas. As you know, water supplied by the PAPMWC failed to comply with the iron secondary maximum contaminant level (SMCL) on January 16, 2018. To investigate the cause of the exceedance, the Division requested PAPMWC to submit the daily operation reports for January through April 2018. The January reports were submitted on February 28, 2018 and the February through April reports were submitted on April 26, 2018. The daily reports contained information such as production data for Wells 5, 6 and 7 and chlorine residual levels to demonstrate the performance of the blending and chlorination treatment system. In review of the reports, the Division could not decipher the data recorded and also found several incomplete reports. The Division sent multiple emails to PAPMWC for clarification on the data but did not receive a response. As such, the Division required a phone conference on April 30, 2018.

Within the multiple emails and during the conference call, the Division questioned the well production data for January 5, 2018, which shows Well 7 as the only well in production on that day. This violates permit provision 8 of the June 2007 Permit Amendment 1 which states that Well 7 shall only operate in conjunction with other wells and shall always startup last and shutdown first. PAPMWC could not explain why the production data was recorded as such and implied that the data must have been recorded in error. The Division further questioned the numerous chlorine residual values recorded on the daily reports that were less than 0.3 mg/L entering the distribution system. This violates permit provision 10 of the Permit Amendment 1. When asked if PAPMWC management were notified by operations staff or by the TESCO system, which monitors and operates the wells, boosters and chlorine injection system, of the low chlorine residual levels, PAPMWC management indicated that they were not informed of the low residuals and are

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corrective actions were taken. PPMWC further indicated that the TESCO system was replaced approximately two months ago and it is not known if the system has been properly programmed, is recording accurately or functioning properly. PPMWC further noted that operation staff rely upon field chlorine analyses to determine the performance of the chlorination system. However, field analyses are only performed once per day during business days. As such, the production and performance of the water system are not monitored or verified on the weekends and holidays, for example, during the President's Day weekend from February 16 to 19, 2018

Subsequent to the call, the Division sent several emails to PPMWC inquiring if the water system had investigated the errors in the reports, the cause of the low chlorine residuals and verified the performance of the TESCO system. However, PPMWC has not responded to the inquiries.

PPMWC's inability to explain the production and performance values recorded on the daily reports indicate that management are not critically reviewing the reports or the work of operations staff. The incomplete reports and noncompliant values recorded by operations staff signifies a lack of understanding of, or a disregard to, the water system's regulatory compliance and operating requirements. Operation staff are simply writing down numbers without assessing the accuracy of the value nor understands the significance of the data. As such, performance of the treatment system are not optimized or corrected immediately to ensure that all water produced is safe, wholesome and potable. Furthermore, operating the water system without verifying if a critical component of your system, the TESCO system, is functioning properly is a significant risk to the water supply and quality served to the PPMWC community, especially when operations staff are not onsite to manually verify the performance of the water system. In addition, PPMWC's delayed response or unresponsiveness to the Division's inquiries regarding the performance and operation of the water system raises significant concerns regarding your actions to potential system failures. This also reflects the level of service the water system provides to your community and your response to customer complaints.

To further investigate the cause of the January 16, 2018 iron exceedance and demonstrate whether PPMWC operated in compliance with your regulatory requirements, PPMWC shall complete and/or submit the following to the Division by **May 14, 2018**.

1. Verify and certify that the TESCO system has been properly programmed and alarms at established set points.
2. Submit screen shots of all critical alarm set points and parameters programmed within the TESCO system that will activate the groundwater supply wells.
3. Submit records of all alarms received from January through April 2018 and documentation showing whether corrective actions were taken in response to the alarms.
4. Submit all chlorine residual values and hours of operation readings for the wells and booster pumps from the TESCO system for January through April 2018.
5. Investigate and explain why the chlorine residuals measured on the online chlorine analyzer significantly deviates from the field analyzer.
6. Submit procedures on how the chlorine dose prior to and after the 350,000 gallon tank are established.
7. Submit the roles and responsibilities for each staff and member involved in the operation and management of the PPMWC water system.

PPMWC has stated on several occasions that you strive to be the best small water system in California and that your mission is to provide "Quality on Tap". Significant improvements in the operation and management of the water system must be made to achieve this mission. PPMWC management needs to establish performance goals for operations staff and routinely review the

reported data to ensure that operations staff are meeting these goals. PAPMWC needs to develop and implement an operational strategy that produces and delivers the highest quality water possible at all times. The production and operation report forms should also be updated to reflect these performance goals. Therefore, by **June 15, 2018**, PAPMWC shall develop and submit to the Division a Water System Operations and Maintenance Plan (Plan). The Plan shall include the following elements:

1. The operations and maintenance schedule for each groundwater source and unit process;
2. The schedule and procedure for flushing dead end mains, and the procedures for disposal of the flushed water including dechlorination;
3. The schedule for routine inspection of reservoirs, and the procedures for cleaning reservoirs;
4. The schedule and procedures for inspecting, repairing, and replacing water mains;
5. The plan and procedures for responding to water supply emergencies;
6. The plan and procedures for responding to consumer complaints;
7. The schedule and procedures for testing backflow prevention assemblies;
8. The schedule and procedures for routine exercising of water main valves;
9. The schedule and program for maintenance and calibration of source flow meters and other online instruments used to determine the quality or quantity of water;
10. The qualifications and training of operating personnel; and
11. The program for control of biological organisms on the interior walls of water mains.

Please note that a Compliance Order will be issued shortly to reaffirm the requirement to submit the Water System Operations and Maintenance Plan by June 15, 2018. If you have any questions regarding this letter, please contact Ms. Van Tsang at (510) 620-3602.

Sincerely,



Eric Lacy, P.E.
District Engineer
Santa Clara District
Division of Drinking Water
State Water Resources Control Board

cc: San Mateo County Environmental Health