BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607 Office of the Secretary: (510) 287-0440

Notice of Time and Location Change

PLANNING COMMITTEE MEETING
Tuesday, March 9, 2021
9:00 a.m.
Virtual*

Notice is hereby given that the Tuesday, March 9, 2021 Planning Committee Meeting of the Board of Directors has been rescheduled from 9:15 a.m. to 9:00 a.m.

Due to COVID-19 and in accordance with the most recent Alameda County Health Order, and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted via webinar and teleconference only**. In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Dated: March 4, 2021

Rischa S. Cole

Rischa S. Cole
Secretary of the District

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BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 – 11th Street, Oakland, CA 94607 Office of the Secretary: (510) 287-0440

AGENDA
Planning Committee
Tuesday, March 9, 2021
9:00 a.m.
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Location

Due to COVID-19 and in accordance with the most recent Alameda County Health Order, and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted by webinar or teleconference only.** In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Committee Members Marguerite Young {Chair}, Lesa R. McIntosh and Frank Mellon will participate by webinar or teleconference

*** Please see appendix for public participation instructions***

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

1. Satellite Recycled Water Projects Update (Tognolini)
2. Private Sewer Lateral Program Update (White)
3. Wastewater Pump Station M Update (White)
4. Water Quality Program Annual Update – 2020 (Briggs)
5. Regulatory Compliance Semi-Annual Report – September 2020 through February 2021 (Briggs)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

APPENDIX

Planning Committee Meeting
Tuesday, March 9, 2021
9:00 a.m.

EBMUD public Board meetings will be conducted via Zoom.
Board committee meetings are recorded, and live-streamed on the District's website.

Please visit this page beforehand to familiarize yourself with Zoom.
https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting

Online
https://ebmud.zoom.us/j/94576194030?pwd=dWZlc3hNU3JNUVBQYmNKWjJSNVZQdz09
Webinar ID: 945 7619 4030
Passcode: 925293

By Phone
Telephone: 1 669 900 6833
Webinar ID: 945 7619 4030
Passcode: 925293
International numbers available: https://ebmud.zoom.us/u/agkOoY9Nt

Providing public comment
The EBMUD Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

If you wish to provide public comment please:

- Use the raise hand feature in Zoom to indicate you wish to make a public comment https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar
    - If you participate by phone, press *9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic
- The Secretary will call each speaker in the order received
- Comments on **non-agenda items** will be heard at the beginning of the meeting
- Comments on **agenda items** will be heard when the item is up for consideration
- Each speaker is allotted 3 minutes to speak; the Committee Chair has the discretion to amend this time based on the number of speakers
- The Secretary will keep track of time and inform each speaker when his/her allotted time has concluded

To *observe* the Planning Committee Meeting,
please visit: https://www.ebmud.com/about-us/board-directors/board-meetings/

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 4, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: Michael T. Tognolini, Director of Water and Natural Resources

SUBJECT: Satellite Recycled Water Projects Update

SUMMARY

The District's Water Supply Management Program 2040 has a recycling goal of 20 million gallons per day (MGD) by 2040. Some of the District's largest irrigators are located far from existing or planned recycled water distribution systems. Satellite recycled water treatment plants (satellite projects) can make recycled water available to some of these large water users to offset potable water use. Satellite projects divert raw wastewater from the local sewage collection system and treat it to a tertiary level with an on-site treatment plant. This memo provides an update on the planning of three potential satellite projects being pursued by customers considering self-financing and constructing the projects. This item will be presented at the March 9, 2021 Planning Committee meeting.

DISCUSSION

Diablo Country Club (DCC)

The DCC is a privately-owned country club with a golf course and recreational facilities located near the base of Mt. Diablo. DCC is located within the District's water service area and the Central Contra Costa Sanitary District (Central San) wastewater service area. DCC has proposed a self-financed satellite project to be constructed on-site, with a preliminary capacity of 0.16 MGD, equal to about one-third of DCC's irrigation demand. In 2012, the District entered into a Memorandum of Understanding (MOU) with DCC and Central San to collaborate on feasibility investigations for the project. In 2015, the District and Central San entered into additional individual MOUs with DCC to address each agency's role.

The DCC satellite project was originally planned as a pilot/demonstration project and was planned to be constructed by 2017 but has since been delayed due to unanticipated zoning requirements, changes to the environmental review approach, and DCC's management turnover. In January 2021, the DCC Board of Directors formally approved the project and will proceed to the next phase of design and construction.

Sequoyah Country Club (SCC)

The SCC is a privately-owned golf course and country club located in the Oakland Hills north of Knowland Park. In 2017, the District completed the Oakland Hills Alternative Water Supply Feasibility Study, which evaluated a potential satellite project located at SCC to serve the golf course and several other irrigation customers in the Oakland Hills. Based on limited wastewater availability and higher costs identified in the study, the District did not recommend implementing the multi-customer Oakland Hills satellite project. However, SCC is considering development of a satellite project to serve its golf course.

SCC has proposed a self-financed satellite project and selected a consultant/contractor team to design, build, operate, and finance the project. The project would produce 0.1 MGD of recycled water, replacing approximately one-half of SCC's irrigation demand. In January and February 2021, District staff met with SCC's project team and City of Oakland staff to discuss roles and responsibilities for implementation of the project. District staff is preparing an MOU to be signed by SCC and the City of Oakland to collaborate on project development.

Rossmoor Community

The Rossmoor Community is a senior adult community with two golf courses and recreational facilities located in the City of Walnut Creek. The Rossmoor Community is located within the District's water service area and Central San's wastewater service area. The Golden Rain Foundation (GRF) is a nonprofit corporation that provides community facilities and services, including utility services, to residents of the Rossmoor Community.

GRF has proposed a self-financed satellite project with a design capacity of 0.5 MGD, which would replace most of the Rossmoor irrigation demand. In December 2020, District staff met with GRF's project team, City of Walnut Creek staff, and Central San staff to discuss roles and responsibilities for implementation of the project. District staff is preparing an MOU to be signed by all parties to collaborate on investigating this potential project.

District Role

The District's role during the planning phase of potential satellite projects includes drafting and executing individual project MOUs establishing agreements for collaborative investigation, providing potable water system information to satellite project teams as requested, and reviewing environmental documentation. If the projects progress toward final design and construction, the District will develop agreements with the satellite project owner addressing permitting, backup potable water service, and any duplication of service issues. The District will also be responsible for ensuring the projects comply with backflow prevention requirements.

Permitting

Satellite projects would be privately owned and operated at customer sites to produce recycled water for irrigation use. Recycled water produced by the satellite projects must meet the Disinfected Tertiary level as defined in the General Permit. The District is exploring permitting structures for satellite projects under the State Water Resources Control Board's General Water Reclamation Requirements for Recycled Water Use, Order WQ 2016-0068-DDW (General Permit).

All satellite projects would undergo environmental review pursuant to the California Environmental Quality Act (CEQA). It is anticipated that the municipality (City or County) in which the project is located would act as the CEQA Lead Agency. The District would review all environmental documentation for each proposed project.

District Fees

It is anticipated that the District will charge a fee to customers implementing satellite projects to cover District costs for project design review, cross-connection testing, and periodic inspections. Satellite customers will not be charged a volumetric rate for recycled water use since the projects will be privately-owned, and capital and ongoing operations and maintenance costs will be self-financed. These three satellite projects combined, if implemented, are anticipated to contribute to less than 1.0 MGD total toward the District's water recycling goal. The projected annual loss in potable water revenue could be about $300,000 for the smaller satellite project and up to $800,000 for a larger satellite project depending on the District volumetric water rate at the time.

NEXT STEPS

The District will continue to coordinate with each satellite project team. MOUs for the SCC and Rossmoor Community projects are in progress to identify agency roles and responsibilities. The MOUs do not obligate the District to implement these projects but set a collaborative framework to evaluate each project.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 4, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: Eileen M. White, Director of Wastewater EMW

SUBJECT: Private Sewer Lateral Program Update

SUMMARY

The Wet Weather Consent Decree (Consent Decree) with the U.S. Environmental Protection Agency requires the District and its seven satellite collection system agencies (Satellites) to eliminate most discharges from the District's three wet weather facilities by 2036 through the reduction of infiltration and inflow. One component of the Consent Decree is the continued implementation of the Regional Private Sewer Lateral (PSL) Program, which includes all Satellites except Berkeley. The Regional PSL Ordinance (Ordinance) has been in effect since 2010 and was modified in May 2019 to provide clarifications and increase rates of compliance. This item will be presented at the March 9, 2021 Planning Committee meeting.

DISCUSSION

The Ordinance requires individual property owners to obtain a compliance certificate when they meet one of three triggers: title transfer, remodeling or construction valued at over $100,000, or a change in water meter size. The May 2019 Ordinance amendments added an interim milestone for homeowners' associations (HOA) and specified new deadlines for property owners with PSLs greater than 1,000 feet in length to complete their required rehabilitation work.

Between 2011 and 2020, the District issued over 40,700 compliance certificates that represent approximately 626 miles of leak-free PSLs or approximately 31 percent of laterals within the program area. The number of PSLs certified to date is significant. However, the District is committed to certifying the maximum number of PSLs possible to achieve the infiltration and inflow reductions required by the Consent Decree. Over the past year and a half, staff has increased focus on enforcement on properties that remain noncompliant.

Common Interest Developments

Common interest developments, which can range from small condominium buildings to large subdivisions, present a special challenge for the PSL Program because property owners may share maintenance responsibility for their PSLs with their HOA. To address this, the Ordinance

established a deadline for all HOA-maintained PSLs to become compliant within ten years of adoption of the Ordinance in 2011 (i.e., by July 12, 2021), whereas individual unit owners with PSL maintenance responsibility within an HOA remain trigger-based. The May 2019 Ordinance amendments added a requirement for HOAs to provide a certified statement, called the Statement of Responsibility, delineating the individual unit owner's and the HOA's maintenance responsibility for the PSLs serving the parcel(s). The Statements of Responsibility were due November 20, 2019. Currently, approximately 65 percent of the HOAs within the program area have submitted Statements of Responsibility.

Staff continues outreach to HOAs that have not submitted all the required information or certified all PSLs within their responsibility to ensure they meet the required July 2021 deadline. This outreach included customized mailings to over 600 HOAs in late 2019, staff presentations to ten HOAs and real estate groups in 2019 and 2020, and follow-up letters to HOAs that are not yet in compliance. Staff plans to create and post video clips with tutorials and answers to frequently asked questions on the program webpage in the coming months.

Parcels or Parcel Groups with Greater Than 1,000 Feet of Sewer Laterals

The Ordinance allows individual property owners and/or common interest developments with PSLs greater than 1,000 feet in length to plan and implement their PSL rehabilitation work on a specified schedule. This schedule includes deadlines for developing a condition assessment plan (July 12, 2016) and a work plan (July 12, 2021). The May 2019 Ordinance amendments provided additional deadlines for completing the rehabilitation work by either July 12, 2026 or, if certain conditions are met, by July 12, 2029. Condition assessment plans have been received by 75 percent of property owners that are known to meet these criteria. Staff is working with additional HOAs and property owners to determine if they meet the criteria and prepare them for submission of the work plan.

Enforcement

To date, high rates of compliance have been achieved through issuing two courtesy notices and one notice of violation to property owners who are out of compliance. As of 2019, approximately 500 properties had been out of compliance for many months or years, some dating as far back as 2012. To reduce this number, the District issued another round of courtesy notices, followed by a notice of violation that included violation follow-up fees of $380. The violation follow-up fee recovers the District's enforcement costs. In February 2020, the first set of notices of violation were mailed and monthly thereafter. More than half of the 500 properties that were out of compliance for many years are now in compliance. Going forward properties that fail to comply will be issued two courtesy notices followed by a notice of violation with follow-up fees imposed. A noncompliance fee of $100 may be assessed monthly to those properties that remain out of compliance.

Staff will continue to closely track the improvements in compliance rates. Should properties remain out of compliance, the District has various options under the Municipal Utility District Act and the Ordinance, including seeking judicial enforcement, which could result in civil penalties of up to $10,000 per day or, in special cases, up to $25,000 per day. Following the May 2019 Ordinance amendments, staff utilized Compliance Agreements to provide property owners additional time to comply, in specific circumstances and with a monetary deposit. This tool allows the District to achieve the ultimate goals of the Ordinance with flexibility and transparency. To date, 34 Compliance Agreements have been executed.

NEXT STEPS

Staff will work with property owners and HOAs to achieve maximum compliance rates and ensure transparent and uniform implementation of the Ordinance to meet the reduction in infiltration and inflow as required under the Consent Decree. Staff will continue efforts to contact property owners and those with special requirements due on July 12, 2021 and will monitor the compliance rates and may propose additional enforcement steps to the Board to ensure uniform compliance. Updates to the cost recovery fees to reflect actual District costs will be brought to the Board for consideration in May 2021.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 4, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: Eileen M. White, Director of Wastewater EMW

SUBJECT: Wastewater Pump Station M Update

SUMMARY

Pump Station M collects and pumps wastewater from Bay Farm Island in Alameda through a force main leading to the Alameda Interceptor. The pump station was constructed by developers over 40 years ago and is located in a residential area across the street from Earhart Elementary School. The City of Alameda (City) undertook some improvements to Pump Station M prior to transferring ownership to the District in 1986; however, additional upgrades are needed. This project also includes upgrades under a separate construction contract to the force main discharge pipelines from Pump Stations C, G, M, N, and R located in Albany, Alameda, and Oakland. The proposed project will improve safety, reliability, operational capability, and access. Staff will provide an update of this project at the March 9, 2021 Planning Committee meeting.

DISCUSSION

In 2014, the District completed a Wastewater Pump Station Master Plan Update and a Pump Station Force Main Condition Assessment Report. Pump Station M and Force Mains C, G, M, N, and R were identified as facilities needing the highest priority improvements, and work began on the first phase in 2017. The first phase includes the pump station improvements and force main investigation, and the design is nearing completion. The second phase includes force main improvements and is scheduled after the investigation work is completed under the first phase.

Construction of Pump Station M improvements will be confined primarily within the pump station site. There will be some work on the adjacent public right-of-way for pump station bypassing, access improvements, and construction staging. Rehabilitation of the pump station is exempt from California Environmental Quality Act requirements. Staff is applying for an encroachment permit from the City for an additional staging area within the City right-of-way and is working with the City on the traffic safety plan.

Seismic Retrofits

The pump station concrete wet and dry wells extend approximately 30 feet below grade. Inspection of the wet well revealed the reinforced concrete is in poor shape. Rehabilitation of the concrete will include resurfacing and recoating to restore the reinforced concrete integrity. In addition, concrete buttresses will be added inside the structure to strengthen walls and to meet current building codes.

Operational Reliability

A large portion of the electrical equipment is located below grade and is at risk if the dry well floods. Electrical, standby electrical, and mechanical equipment will be replaced and located above grade to improve reliability and meet current codes. New motors for pumps will be rated submersible to resist any potential flooding. New permanent bypass piping will be included for use during emergency outages or for future maintenance. The existing standby emergency electric generator will be overhauled to provide reliable backup electric power in case of a utility power outage. Alameda Municipal Power will replace the utility power transformer to provide sufficient capacity for pump station loads. Deteriorated pump station building features will also be replaced to improve aesthetics for surrounding neighbors.

Safety

Pump Station M safety systems including the ventilation system will be replaced to meet current codes. Access to equipment controls will be improved, and a remote monitoring system to connect Pump Station M to the Main Wastewater Treatment Plant controls system will be installed to facilitate operations and maintenance. New stairs will replace the ladder that is used for accessing the lower pump station structure levels, and new openings will be added to improve access to lower level equipment.

Odor Control

An alternative odor control technology will replace the existing large volume sodium hypochlorite system. This system will reduce the potential exposure of hazardous chemicals to the neighboring residential community.

Force Main Improvements

Improvements to Force Mains C, G, M, N, and R will include new access structures for pipeline cleaning and inspections. Additional underground investigations are needed to locate City-owned, high-voltage electrical transmission lines and communications cabling. To minimize delays to Pump Station M rehabilitation work, force main work has been deferred and will be part of the second phase of construction. Permits are required from the Army Corps of Engineers and San Francisco Bay Regional Water Quality Control Board since a portion of the work will be performed within the San Leandro Channel tidal zone.

Pump Station Bypass

Pump Station M will be out of service during the dry weather season and part of the wet weather season to facilitate construction. A temporary bypass system will be used to divert sewage flows around the pump station. The temporary bypass system will have monitoring and alerting capabilities and on-site backup electric power. Other contingency planning will be incorporated to prevent sanitary sewer overflows.

Community Outreach

Staff provided an overview of the project and answered questions during presentations to the following community groups:

Community Group	Date
Centre Court Homeowners' Association (HOA)	January 8, 2020
Brittany Landing Harbor HOA	January 16, 2020
Earhart Elementary School	February 5, 2020
Harbor Bay Tennis Club	February 11, 2020
Community of Harbor Bay Isle Master HOA	February 26, 2020

Staff will continue to provide project and schedule updates to the community and will coordinate with the community throughout the construction of the project. In addition, staff has met frequently with the City to discuss and address encroachment and traffic permits for the project.

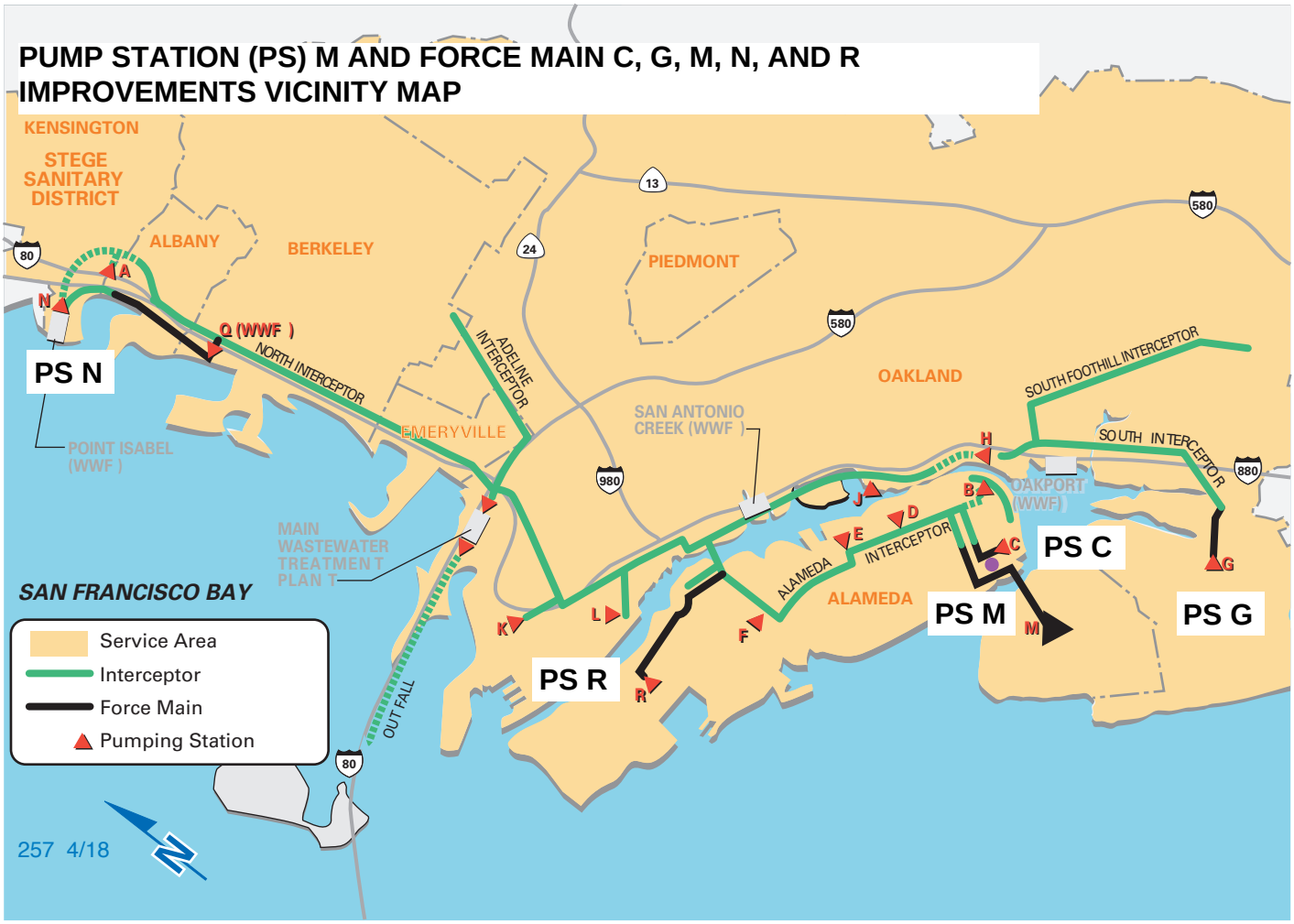
NEXT STEPS

Design for the Pump Station M Rehabilitation and Force Main Investigations Project will be completed by March 2021. Environmental permit applications for the work within the tidal zone have been submitted and should be approved in April 2021. The construction project will be advertised in local newspapers in May 2021 and brought to the Board for consideration in July 2021. Construction is expected to begin in September 2021 and completed by March 2023. The construction for the force main improvements is expected to begin in early 2023.

CCC:EMW

Attachment


PUMP STATION M SITE AND NEIGHBORHOOD
EARHART ELEMENTARY SCHOOL
PUMP STATION M
Packet Landing Rd
Robert Davey Jr Dr


PUMP STATION (PS) M AND FORCE MAIN C, G, M, N, AND R IMPROVEMENTS VICINITY MAP
KENSINGTON
STEGE SANITARY DISTRICT
ALBANY
BERKELEY
PIEDMONT
OAKLAND
EMERYVILLE
SAN ANTONIO CREEK (WWF)
POINT ISABEL (WWF)
MAIN WASTEWATER TREATMENT PLANT
OAKPORT (WWF)
ALAMEDA
ALAMEDA INTERCEPTOR
ADELINE INTERCEPTOR
NORTH INTERCEPTOR
SOUTH FOOTHILL INTERCEPTOR
SOUTH INTERCEPTOR
OUT FALL
SAN FRANCISCO BAY
PS N
PS C
PS M
PS G
PS R
Service Area
Interceptor
Force Main
Pumping Station
257 4/18

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 4, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: David A. Briggs, Director of Operations and Maintenance DAB

SUBJECT: Water Quality Program Annual Update – 2020

SUMMARY

The attached report provides an update on the District's water quality initiatives to ensure delivery of high-quality water to its customers. Water quality data for calendar year 2020 is summarized in the report. A presentation on the Water Quality Program will be made at the March 9, 2021 Planning Committee meeting.

DISCUSSION

From January 1, 2020 through December 31, 2020, the District met all federal and state drinking water standards and 97 percent of the District's internal goals (120 of 124 goals were met). As in previous updates, levels of three groups of disinfection byproducts were higher than District goals but continue to be stable. These include total trihalomethanes, five haloacetic acids, and N-nitroso-dimethylamine (NDMA). The District continues to minimize potential lead exposure to customers and monitor contaminants of emerging concern, including pending regulatory actions and legislation.

CCC:DAB:rp

Attachments

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ATTACHMENT 1

WATER QUALITY ANNUAL REPORT – 2020

This report provides the status of District efforts to ensure delivery of high-quality water to its customers.

District Water Quality Goals

The District's internal water quality goals are substantially more stringent than federal and state water quality standards. The goals are adjusted when appropriate, depending on the latest technical information and regulatory changes. During 2020, the District exceeded three internal water quality goals related to disinfectant byproducts (DBPs).

- Total trihalomethanes (TTHMs) and five haloacetic acids (HAA5) are regulated DBPs formed when chlorine reacts with natural organic matter in raw water. The District's current goals of 40 parts per billion (ppb) for TTHMs and 30 ppb for HAA5 are half of regulatory standards. The District's goal was exceeded in 26 out of 64 individual TTHM samples and 19 out of 64 HAA5 samples in 2020. Achieving lower levels of these DBPs with current treatment technologies employed at the water treatment plants could compromise appropriate disinfection of the water. Future capital projects at the water treatment plants will enable better control of DBPs; however, the levels are unlikely to be consistently below the District's internal goals.
- N-nitroso-dimethylamine (NDMA) is one of several nitrosamines that form when chloramine reacts with organic precursor material in water. NDMA forms slowly and is generally detected in parts of the distribution system with very long residence time. In 2020, the District's water quality goal was exceeded in four of 20 NDMA samples. The District's goal is set at the Public Health Goal (PHG) because there is currently no regulatory standard for NDMA. The regulatory future of NDMA remains uncertain. The U.S. Environmental Protection Agency (USEPA) does not plan to imminently regulate nitrosamines in drinking water, and existing (but limited) research has not indicated a significantly public health impact. However, the State Water Resources Control Board (State Board) has indicated that it does plan to regulate NDMA in the future.

Maintaining a disinfectant residual in the distribution system controls the growth of microorganisms and maintains the safety of drinking water. The District analyzes hundreds of chlorine residual samples each month from water mains and distribution storage reservoirs. The District's goal is to maintain at least 0.5 mg/L chlorine residual in 95 percent of samples each month. In 2020, this goal was met every month for samples taken from water mains and in 11 of 12 months for samples taken from distribution reservoirs. During wildfire season numerous "red flag" warnings are declared by the National Weather Service. Reservoirs are kept as full as possible during these events to maximize water for firefighting. The downside to maintaining higher water storage in these situations is that the retention time (age) of the water in the reservoirs increases, resulting in a reduction in the chlorine residual. The District is continuously balancing multiple competing objectives when operating the distribution system.

Lead

The District continues to minimize customer exposure to lead in drinking water. The federal and state Action Level for lead is 15 parts per billion (ppb). Based on data from the customer sampling voucher program, school sampling, and periodic studies, the corrosion control program in the distribution system effectively minimizes the release of lead from any remaining leaded components.

The customer sampling program continues to be successful. Since inception in 2017, over 1,700 customers have taken advantage of the program. Results continue to be good, with 90 percent of samples less than one ppb. Many positive comments have been received about this sampling effort from customers concerned about lead. The District is exploring ways to streamline the administrative and recordkeeping aspects of the program.

The District completed a detailed inventory of all service lines and developed a removal plan for any remaining lead components. Development of the inventory was a four-year effort including manual searches of over 215,000 tap records and hundreds of field inspections. The effort confirmed that 94 percent of service lines are copper, which is now the District standard material. A few dozen lead service lines were found during the review and immediately replaced with copper. The remaining service lines are predominantly plastic or galvanized steel.

During the detailed inventory, over 2,300 galvanized steel service lines were identified, most of which were installed before 1950. These services are conservatively assumed to include short connectors made of lead (also known as goosenecks) based on construction methods used at the time. While there may be lead components on the galvanized steel services, thousands of customer tap samples confirm lead concentrations are not elevated and do not represent a public health risk. The District developed a plan, which was approved by the State Board, to replace at least 125 galvanized steel service lines each year during routine pipeline replacement, repair of breaks and leaks, or if needed, through a dedicated effort. Replacement for all such lines will take up to 20 years. The annual target for FY21 has been met.

The District supported Assembly Bill (AB) 100 (Holden) which intends to bolster existing law by further limiting the amount of lead in plumbing fixtures. AB 100 is similar to AB 2060 (Holden), which the District supported in 2019 but failed to advance out of the legislature. The stricter performance standard contained in both AB 2060 and AB 100 is expected to be adopted by the USEPA by 2024.

Regulatory Updates

The State Board and USEPA continue efforts to regulate perfluoroalkyl substances and polyfluoroalkyl substances (collectively known as PFAS). In California, Notification Levels and Response Levels for two PFAS, Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS), have been issued. Notification Levels in California for PFOA and PFOS are 5.1 parts per trillion (ppt) and 6.5 ppt, respectively; Response Levels are 10 ppt and 40 ppt. California is working on Notification Levels for seven additional PFAS.

The State Board continues its phased monitoring program, requiring water suppliers to monitor PFAS in accordance with their risk for contamination. In each of the first three rounds of monitoring orders, the District has not been required to monitor due to the relatively protected nature of our source water. Nevertheless, the District proactively monitored for PFAS in 2020. Quarterly samples from the influent and effluent of each in-service water treatment plant were collected and analyzed for 18 different PFAS compounds. Most results were “non-detects”; however, there were some low-level detections of some compounds. All results were below the Notification Levels. Additional sampling will be done in the East Bay reservoirs and treatment plants during 2021.

The State Board continues to develop regulations for microplastics in drinking water as required by Senate Bill 1422. A definition of microplastics was finalized in June 2020 that includes particles less than 5 millimeters and as small as 1 micrometer (between 5,000 and 1 micrometers). Analytical method development is ongoing. Drinking water utilities will eventually be required to conduct four consecutive years of microplastics monitoring.

Under the new administration, the USEPA has committed to develop standards for PFOA and PFOS in drinking water by early 2023 and will require monitoring for a list of unregulated contaminants between 2023 and 2025. Most of these unregulated contaminants are PFAS compounds. USEPA’s review of the revisions to the Lead and Copper Rule is ongoing. The District will continue to monitor regulatory activity and respond accordingly.

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EBMUD Annual Water Quality Report - January 1, 2020 through December 30, 2020

Parameter	Units	MCL	PHG	DLR	SMCL	NL	other	Basis	Goal	Status*
USEPA/State Water Quality Regulations										
Primary (Health Standards)										
Inorganic Chemicals										
Aluminum	ug/L	1000	600	50	200			½SMCL	100	Met
Antimony	ug/L	6	1	6				PHG	1	Met
Arsenic	ug/L	10	0.004	2				PHG	0.004	Met
Asbestos	MFL	7	7	0.2				½MCL	3.5	Met
Barium	ug/L	1000	2000	100				½MCL	500	Met
Beryllium	ug/L	4	1	1				PHG	1	Met
Cadmium	ug/L	5	0.04	1				PHG	0.04	Met
Chromium (total)	ug/L	50		10				½MCL	25	Met
Cyanide	mg/L	0.15	0.15	0.1				½MCL	0.075	Met
Fluoride (source water)	mg/L	2	1	0.1				PHG	1	Met
Hexavalent chromium	ug/L	-	0.02	-				PHG	0.02	Met
Mercury	ug/L	2	1.2	1				½MCL	1	Met
Nickel	ug/L	100	12	10				PHG	12	Met
Nitrate + Nitrite Total (as N)	mg/L	10	10	-				½MCL	5	Met
Nitrate as N [x4.5 for NO3]	mg/L	10	10	0.4				½MCL	5	Met
Nitrite (as N)	mg/L	1	1	0.4				½MCL	0.5	Met
Perchlorate	ug/L	6	1	2				PHG	1	Met
Selenium	ug/L	50	30	5				½MCL	25	Met
Thallium	ug/L	2	0.1	1				PHG	0.1	Met
Organic Chemicals										
Volatile Organic Compounds (VOCs)										
1,1,1-Trichloroethane (1,1,1-TCA)	ug/L	200	1000	0.5				½MCL	100	Met
1,1,2,2-Tetrachloroethane	ug/L	1	0.1	0.5				PHG	0.1	Met
1,1,2-Trichloroethane (1,1,2-TCA)	ug/L	5	0.3	0.5				PHG	0.3	Met
1,1-Dichloroethane (1,1-DCA)	ug/L	5	3	0.5				½MCL	2.5	Met
1,1-Dichloroethylene (1,1-DCE)	ug/L	6	10	0.5				½MCL	3	Met
1,2,4-Trichlorobenzene	ug/L	5	5	0.5				½MCL	2.5	Met
1,2-Dichlorobenzene (o-DCB)	ug/L	600	600	0.5				½MCL	300	Met

Note: District to meet all applicable regulatory requirements at all times.

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EBMUD Annual Water Quality Report - January 1, 2020 through December 30, 2020

Parameter	Units	MCL	PHG	DLR	SMCL	NL	other	Basis	Goal	Status*
1,2-Dichloroethane (1,2-DCA)	ug/L	0.5	0.4	0.5				½MCL	0.25	Met
1,2-Dichloropropane	ug/L	5	0.5	0.5				PHG	0.5	Met
1,3-Dichloropropene (Total)	ug/L	0.5	0.2	0.5				PHG	0.2	Met
1,4-Dichlorobenzene (p-DCB)	ug/L	5	6	0.5				½MCL	2.5	Met
Benzene	ug/L	1	0.15	0.5				PHG	0.15	Met
Carbon Tetrachloride	ug/L	0.5	0.1	0.5				PHG	0.1	Met
Dichloromethane (Methylene Chloride)	ug/L	5	4	0.5				½MCL	2.5	Met
Ethylbenzene	ug/L	300	300	0.5				½MCL	150	Met
Freon 113 (1,1,2 trichloro 1,2,2 trifluoroethane)	ug/L	1200	4000	10				½MCL	600	Met
Methyl-tert-butyl ether (MTBE)	ug/L	13	13	3	5			½SMCL	2.5	Met
Monochlorobenzene (Chlorobenzene)	ug/L	70	70	0.5				½MCL	35	Met
Styrene	ug/L	100	0.5	0.5				PHG	0.5	Met
Tetrachloroethylene	ug/L	5	0.06	0.5				PHG	0.06	Met
Toluene	ug/L	150	150	0.5				½MCL	75	Met
Trichloroethylene (TCE)	ug/L	5	1.7	0.5				PHG	1.7	Met
Trichlorofluoromethane (Freon 11)	ug/L	150	1300	5				½MCL	75	Met
Vinyl Chloride (VC)	ug/L	0.5	0.05	0.5				PHG	0.05	Met
Xylenes (Total)	ug/L	1750	1800	0.5				½MCL	875	Met
cis-1,2-Dichlorethylene (c-1,2-DCE)	ug/L	6	13	0.5				½MCL	3	Met
trans-1,2-Dichloroethylene (t-1,2-DCE)	ug/L	10	50	0.5				½MCL	5	Met
Synthetic Organic Compounds (SOCs)										
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	0.0017	0.01				PHG	0.0017	Met
2,3,7,8-TCDD (Dioxin)	pg/L	30	0.05	5				PHG	0.05	Met
2,4,5-TP (Silvex)	ug/L	50	3	1				PHG	3	Met
2,4-D	ug/L	70	20	10				PHG	20	Met
Alachlor (Alanex)	ug/L	2	4	1				½MCL	1	Met
Atrazine (Aatrex)	ug/L	1	0.15	0.5				PHG	0.15	Met
Bentazon (Basagran)	ug/L	18	200	2				½MCL	9	Met
Benzo(a)pyrene	ug/L	0.2	0.007	0.1				PHG	0.007	Met

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Parameter	Units	MCL	PHG	DLR	SMCL	NL	other	Basis	Goal	Status*
Bis(2-ethylhexyl)phthalate (DEHP)	ug/L	4	12	3				½MCL	2	Met
Carbofuran	ug/L	18	0.7	5				PHG	0.7	Met
Chlordane	ug/L	0.1	0.03	0.1				PHG	0.03	Met
Dalapon	ug/L	200	790	10				½MCL	100	Met
Di(2-ethylhexyl)adipate	ug/L	400	200	5				½MCL	200	Met
Dinoseb (DNBP)	ug/L	7	14	2				½MCL	3.5	Met
Diquat	ug/L	20	6	4				PHG	6	Met
Endothall	ug/L	100	94	45				½MCL	50	Met
Endrin	ug/L	2	0.3	0.1				PHG	0.3	Met
Ethylene dibromide (EDB)	ug/L	0.05	0.01	0.02				PHG	0.01	Met
Glyphosate	ug/L	700	900	25				½MCL	350	Met
Heptachlor	ug/L	0.01	0.008	0.01				½MCL	0.005	Met
Heptachlor Epoxide	ug/L	0.01	0.006	0.01				½MCL	0.005	Met
Hexachlorobenzene	ug/L	1	0.03	0.5				PHG	0.03	Met
Hexachlorocyclopentadiene	ug/L	50	2	1				PHG	2	Met
Lindane (Gamma BHC)	ug/L	0.2	0.032	0.2				PHG	0.032	Met
Methoxychlor	ug/L	30	0.09	10				PHG	0.09	Met
Molinate	ug/L	20	1	2				PHG	1	Met
Oxamyl (Vydate)	ug/L	50	26	20				½MCL	25	Met
PCB's	ug/L	0.5	0.09	0.5				PHG	0.09	Met
Pentachlorophenol (PCP)	ug/L	1	0.3	0.2				PHG	0.3	Met
Picloram	ug/L	500	166	1				PHG	166	Met
Simazine	ug/L	4	4	1				½MCL	2	Met
Thiobencarb	ug/L	70	42	1	1			½SMCL	0.5	Met
Toxaphene	ug/L	3	0.03	1				PHG	0.03	Met
1,2,3-Trichloropropane	ug/L	0.005	0.0007	0.005				PHG	0.0007	Met
Disinfection By-Products (DBPs)										
Bromate	ug/L	10	0.1	1				½MCL	5	Met
Chlorite	ug/L	1000	50	20				PHG	50	Met
Haloacetic Acids (HAA5)	ug/L	60						½MCL	30	41%
Total Trihalomethanes (TTHM)	ug/L	80						½MCL	40	72%
Radionuclides										
Alpha	pCi/L	15		3				½MCL	7.5	Met
Beta	pCi/L			4			50	Other [1]	25	Met
Radium 226 + 228	pCi/L	5						½MCL	2.5	Met
Strontium-90	pCi/L	8	0.35	2				PHG	0.35	Met

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EBMUD Annual Water Quality Report - January 1, 2020 through December 30, 2020

Parameter	Units	MCL	PHG	DLR	SMCL	NL	other	Basis	Goal	Status*
Tritium	pCi/L	20000	400	1000				PHG	400	Met
Uranium	pCi/L	20	0.43	1				PHG	0.43	Met
Microbiological										
%Total Coliforms Positive/Mo.	Organisms/ 100 ml	5%						Other [2]	0.5%	Met
TCR Tap Total Chlorine Residual	mg-Cl_2/L							Meets Partnership for Safe Water	≥ 0.5 mg-Cl_2/L in ≥95% of routine samples per month	Met
Reservoir Total Chlorine Resdiual	mg-Cl_2/L							Exceeds Partnership for Safe Water [3]	≥ 0.5 mg-Cl_2/L in ≥95% of reservoirs per month	Met
Treatment Techniques										
Individual Filter Effluent (IFE) Turbidity	NTU							Exceeds Partnership for Safe Water [4]	<0.10 NTU more than 99.5% of time per filter	Met
Combined Filter Effluent (CFE) Turbidity	NTU						-	Exceeds Partnership for Safe Water [4]	< 0.10 NTU more than 99.9% of the time.	Met
Distribution System Fluoride	mg/L							Other [5]	0.6-1.2	Met
CT Ratio							1	Other [6]	>1.0	Met
Lead 90th percentile	ug/L		0.2	5			15	½ AL[7]	7.5	Met
Copper 90th percentile	ug/L		300	50			1300	½ AL[8]	650	Met
Langelier Saturation Index (LSI)								Corrosion Control	-0.5 to 0.5 in 95% WTP effluent samples (annually)	Met
Acrylamide							0.05% monomer by wt. dose not to exceed 1 mg/L	Other [9]	0.05% monomer by wt. dose not to exceed 1 mg/L	Met
Secondary (Aesthetic) Standards										
Aluminum	ug/L	1000	600	50	200			½SMCL	100	Met
Chloride	mg/L				250			½SMCL	125	Met

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EBMUD Annual Water Quality Report - January 1, 2020 through December 30, 2020

Parameter	Units	MCL	PHG	DLR	SMCL	NL	other	Basis	Goal	Status*
Color	color unit				15			½SMCL	7.5	Met
Copper	ug/L		300	50	1000			PHG	300	Met
Foaming agents (MBAS)	ug/L				500			½SMCL	250	Met
Iron	ug/L				300		100	Other [10]	100	Met
Manganese	ug/L				50	500	15	Other [10]	15	Met
Methyl tertiary butyl ether (MTBE)	ug/L	13	13	3	5			½SMCL	2.5	Met
Odor threshold	TON				3			SMCL	3	Met
Silver	ug/L				100			½SMCL	50	Met
Specific Conductance	uS/cm				900			½SMCL	450	Met
Sulfate	mg/L				250			½SMCL	125	Met
Thiobencarb	ug/L	70	42	1	1			½SMCL	0.5	Met
Total Dissolved Solids	mg/L				500			½SMCL	250	Met
Turbidity (distribution)	NTU				5			½SMCL	2.5	Met
Zinc	ug/L				5000			½SMCL	2500	Met
Customer Expectations										
District-caused complaints	Com-plaints/ month						30	Other [11]	30	Met
Emerging Contaminants										
Inorganic Chemicals										
Boron	ug/L			100		1000		½NL	500	Met
Chlorate	ug/L					800		½NL	400	Met
Organic Chemicals										
1,2,4-Trimethylbenzene	ug/L					330		½NL	165	Met
1,3,5-Trimethylbenzene	ug/L					330		½NL	165	Met
Cylindrospermopsin	ug/L						0.7	HA [12]	0.7	Met
Microcyctins	ug/L						0.3	HA [12]	0.3	Met
N-Nitrosodi-methylamine [NDMA]	ng/L		3			10		PHG	3	20%
N-Nitrosodiethylamine [NDEA]	ng/L					10		½NL	5	Met
Naphthalene	ug/L					17		½NL	8.5	Met

[1] ½ screening level

[2] 1/10th 5% MCL

[3] ≥ 0.5 mg-Cl2/L in ≥95% of routine monthly samples
[4] <0.10 NTU 95% of the time
[5] Optimal Fluoride Dose (0.7mg/L) per 2015 US Public Health Service recommendation

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[6] CT ratio of 1 is the minimum for compliance; goal is be better than or equal to 1 at all times
[7] ½ Action Level
[8] ½ Action Level; compliance based on in-home samples
[9] USEPA Treatment Technique
[10] Based on operational experience
[11] Based on historical data
[12] USEPA Health Advisory Level

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 4, 2021

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: David A. Briggs, Director of Operations and Maintenance

SUBJECT: Regulatory Compliance Semi-Annual Report – September 2020 through February 2021

SUMMARY

This memorandum summarizes the key regulatory issues and compliance activities since the last Regulatory Compliance Semi-Annual Report on September 8, 2020. A presentation outlining the status of these issues and activities will be provided at the March 9, 2021 Planning Committee meeting.

DISCUSSION

An overview of the major regulatory issues and activities during the reporting period follows. Specific details and activities are contained in the attached report.

Environmental Compliance

The District reported six pH exceedances to the West County Wastewater District from the Richmond Advanced Recycled Expansion facility at the Chevron Refinery. The District is installing a mixing system within the waste equalization tank to provide better neutralization of waste streams prior to discharge.

On December 16, 2020, a 97,000-gallon sanitary sewer overflow (SSO) occurred on Bay Farm Island in Alameda after an electrical failure at the District's Pump Station M. Staff collected daily water samples from the lagoon for analysis and posted signs at several locations to inform the public of the SSO in the area. On December 26, 2020, based on water quality results and in consultation with the Alameda County Department of Environmental Health, the District removed the signage.

In December 2020, a $1,500 penalty was settled with the Bay Area Air Quality Management District for a violation associated with a February 25, 2020 inspection of the Adeline Fuel Facility. A Notice of Violation was issued for using non-compliant fuel dispensing hoses.

Workplace Health and Safety

The District's Strategic Plan includes a Key Performance Indicator (KPI) for the Lost Time Injury Rate (LTIR) to be less than or equal to 3.0. The annual running LTIR as of February 28, 2021 is 1.33, significantly lower than the KPI of 3.0.

The District experienced two serious injuries during this period. On October 13, 2020, a paving employee suffered a partial amputation while operating a hydraulic lift gate. There was no follow-up investigation by the California Occupational Safety and Health Administration (Cal/OSHA). On November 4, 2020, a Heavy Transport Operator suffered a serious injury when he walked into an open excavation. Cal/OSHA completed an investigation and issued a Notice of No Violation on February 4, 2021.

Emergency Preparedness and Response

The District's Emergency Operations Team (EOT) was activated in March 2020 during the start of the pandemic and has been in continuous activation since to guide the District's response.

On October 22, 2020, the District's EOT conducted a COVID-19 exercise using Microsoft Teams. Over 250 employees and 10 guests participated. Participants included representatives from Alameda County Water District, Contra Costa Water District, Los Angeles Department of Water and Power, Las Vegas Valley Water District, and Santa Clara Valley Water District, along with members of the District's EOT. The group walked through a facilitated discussion of the chronology of events and lessons learned in the pandemic covering the period from January 2020 through July 2020.

CCC:DAB:rp

Attachment

ATTACHMENT

REGULATORY COMPLIANCE SEMI-ANNUAL REPORT
September 2020 through February 2021

This report provides the status of the District's efforts to meet the objectives of and comply with environmental, health and safety regulations in accordance with District Policies 7.05 – Sustainability and Resilience and 7.09 – Workplace Health and Safety.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AND WATER DISCHARGE REQUIREMENTS PERMIT ISSUES

Central Reservoir Under Drain Discharge: On September 21, 2020, the District received a copy of a letter from the *Friends of Sausal Creek* to the City of Oakland inquiring about an ongoing discharge into Sausal Creek. District staff confirmed the source of discharge was from the drainage system from Central Reservoir. Open-cut reservoir discharges were disclosed in our application for NPDES permit coverage for drinking water system discharges to the State Water Resources Control Board. Staff sampled the discharge and noted levels of chlorine at 0.48 mg/l at the discharge into the creek. Approximately 30 feet downstream of the discharge, the chlorine residual was non-detect and staff noted fish swimming in pools. The sample at the discharge exceeded the permit limit (0.1 mg/L) which triggered a review and adjustment of Best Management Practices (BMP). A de-chlorination system was immediately installed, and chlorine levels are no longer detectable. A capital project is underway to replace Central Reservoir. Once the reservoir is replaced the under-drain discharge will cease. The San Francisco Regional Water Quality Control Board was satisfied with our actions.

Pump Station M sanitary sewer overflow (SSO): On December 16, 2020, a failure within the electrical system at Pump Station M led to a SSO on Bay Farm Island in Alameda. Approximately 97,000 gallons of untreated wastewater overflowed from collection system manholes, entered storm drains, and entered a large storm water lagoon. The SSO occurred when the automatic transfer switch failed to initiate back-up power. The alarm dialer was disabled, and therefore, did not provide timely warning of rising wastewater levels. Staff collected daily water samples from the storm water lagoon for analysis and to understand water quality impacts. Community warning signs were posted at several locations to inform the public of the release of sewage in the area. Email was also used to communicate to residents through local homeowner associations. In the days immediately following the SSO, the District conducted street sweeping and landscape improvements on impacted streets and properties. On December 26, 2020, after bacterial water quality objectives were confirmed with sampling and after consultation with the Alameda County Department of Environmental Health, the District removed signage. All equipment and alarm systems at the pump station have been restored to service and are now fully functional.

Upcountry Wastewater and Water Treatment Plants: Three of the four upcountry wastewater treatment plants are now regulated under the State Water Resources Control Board General Order. These include Pardee Recreation Area, Pardee Center, and Camanche North Shore. Camanche South Shore continues to operate under an individual permit, and the District will soon be required to apply for coverage under the General Order for this treatment plant.

Pardee Recreation Area Water Treatment Plant is located at the top of steep terrain about 720 feet upstream from Pardee Reservoir (Reservoir). The facility's backwash water is currently regulated under an expired NPDES Permit. After multiple interagency meetings, the Central Valley Regional Water Quality Control Board provided verbal intent to regulate the facility under its conditional waiver resolution for specific discharges, including backwash water from water treatment facilities. Staff will apply for the conditional waiver, which will require less monitoring and reporting requirements.

Orinda Water Treatment Plant (WTP) Dichlorobromomethane (DCBM) Exceedance: On January 25, 2021, a filter backwash discharge from the Orinda WTP to San Pablo Creek exceeded the NPDES permit effluent limit for DCBM. Staff notified the San Francisco Regional Water Quality Control Board (SFRWQCB) as required, and a five-day report was prepared and submitted. No environmental impacts were observed. Follow-up sampling confirmed the discharge had returned to levels below compliance limits.

The sample collected on January 25, 2021 was taken during a time when the plant was drafting heavily from Briones Reservoir due to the low-flow operation associated with construction in the Pardee Tunnel for a new chemical feed facility. Water from Briones Reservoir has higher bromide levels than the water from Pardee Reservoir and produces more DCBM when chlorinated. Staff met with the SFRWQCB on February 11, 2021 to review the incident. The SFRWQCB understood the contributing factors and noted that there is no easy corrective action as the system was operating as designed. No further enforcement action is anticipated.

Enhanced Compliance Action (ECA) Quarterly Reports:
Leak Detection ECA – The District completed an ECA as part of the final settlement agreement related to three water main breaks in late 2015 and early 2016. The ECA required installation of approximately 970 leak detection devices at locations where pipes cross or are adjacent to creeks. Based on the success of the project, the District purchased additional leak detection devices to expand the leak detection network. The final report was submitted on September 30, 2020 in accordance with regulatory requirements.

Chlorine Analyzer ECA – On May 24, 2019, the SFRWQCB issued a Settlement Agreement and Stipulation Order to the District for an exceedance of chlorine in the filter backwash discharge at the Orinda WTP. The non-compliant discharge occurred on September 6, 2017. The SFRWQCB agreed to suspend a portion of the administrative liability pending completion of an ECA. The ECA stipulated the purchase and installation of chlorine analyzers at distribution reservoirs, allowing improved response to low chlorine residual in the distribution system. The ECA deliverable included quarterly status reports on the purchase, installation, and performance of the chlorine analyzers. The final report to close out the ECA was submitted on September 30, 2020 in accordance with regulatory requirements.

AIR PERMIT COMPLIANCE

Adeline Fuel Facility Air Violation Settlement: On February 25, 2020, the Bay Area Air Quality Management District (BAAQMD) conducted an inspection at the Adeline Fuel Facility and found a violation for use of non-compliant fuel dispensing hoses and issued a Notice of Violation

(NOV). The District was directed to replace the hoses with low permeation hoses within seven days of the initial NOV. The violation was corrected by a District contractor on March 2, 2020. On November 25, 2020, a Notice of Proposed Civil Penalty of $1,500 was issued by the BAAQMD to resolve the matter. The District settled for the proposed amount on December 17, 2020 instead of contesting the violation.

OTHER ENVIRONMENTAL ISSUES

Richmond Advance Recycled Expansion (RARE) pH Violations: The District reported six pH exceedances to the West County Wastewater District (WCWD) from the RARE at the Chevron Refinery in this reporting period. WCWD issued NOVs for each of these exceedances. The root cause of these exceedances is an undersized waste equalization tank upstream of the discharge point. Since there is no room at the site to install a larger tank, the District is installing a mixing system within the existing waste equalization tank to provide better neutralization of the various waste streams that enter the tank prior to their discharge. The system is scheduled to be operational in Fall 2021. On February 2, 2021, WCWD issued a compliance schedule to ensure this mixing system is completed and has requested monthly status updates on the work. WCWD will not issue NOVs to the District if there are any pH exceedances during the compliance schedule period.

Vacuum Slurry Pilot: The District is currently running a multi-year pilot study to improve the management of trench slurry generated by operations. The pilot study has been operating for over a year. This pilot study includes two trench slurry management systems that are owned and operated by Bradley Tanks, Inc (BTI). BTI operates the slurry management systems at the Oakport materials yard in Oakland and at the Briones rock pile area in Orinda. The BTI slurry management system effectively decants the water from the soil. Both the water and soil portions of the trench slurry are characterized for proper disposal. The decanted slurry water is characterized for disposal at the Main Wastewater Treatment Plant, and the soil is characterized for reuse as daily cover at Keller Canyon Landfill in Pittsburg.

District work in contaminated soils: Development at sites with remediation and land use restrictions is increasing. These sites are actively regulated by the Department of Toxic Substances Control (DTSC), SFRWQCB, local County Health Care agencies, and in some cases the U.S. Environmental Protection Agency and U.S. military. These sites pose complex challenges for installation and maintenance of the District's underground infrastructure to ensure worker health and safety, and also create risk and liability for the District. Staff is working closely with the DTSC, SFRWQCB, and Alameda County Department of Environmental Health to confirm new water infrastructure utilities are placed in clean utility corridors (CUC). The trench soil investigation process and confirmation of CUCs ensures the District can support these developments in a safe and compliant manner.

Integrated Pest Management (IPM) Program: On December 11, 2020, staff hosted a virtual meeting to update the public on the District's IPM program guidelines. The District established an IPM program in the 1990s to develop a consistent approach toward pest management throughout the District. The IPM program provides written guidance for determining the most appropriate pest control methods for a particular application, including, but not limited to, the

use of chemicals. In 2019, the District received feedback for improving various pest management processes through a series of public meetings in the Bay Area, Stockton, and upcountry. The purpose of the December 2020 meeting was to share the proposed draft updates to the guidelines and solicit feedback. The comments helped shape the final draft of the IPM guidelines which will be presented to the Sustainability/Energy Committee on April 27, 2021.

WORKPLACE HEALTH AND SAFETY

Lost Time Injury Rate: The Workforce Planning and Development goal in the District's Strategic Plan includes a Key Performance Indicator (KPI) for a Lost Time Injury Rate (LTIR) of less than or equal to 3.0. The District's rolling 12-month LTIR as of February 28, 2021 is 1.33, significantly below the KPI of 3.0. The LTIR measures the number of work-related injuries or illnesses resulting in days away from work per 100 employees. The 2020 OSHA 300 Log of Injuries and Illnesses includes five lost time cases presumed to be related to employee-to-employee transmission of the coronavirus. Overall, the District's safety measures have significantly limited work-related contraction of the virus.

The number of lost time hours due to injury or illness has fallen by approximately 50 percent over the last ten years from 35,282 hours in 2010 to 18,090 hours in 2020. This is a reduction of 17,192 hours, the equivalent of approximately 10 full-time employees. The District continues to focus on preventing injuries by utilizing leading indicators such as supervisor presence in the field, number of local safety committee meetings held, safety training hours completed, injury investigation reports completed, and presenting lost time injury investigation results at management and staff meetings.

California Occupational Safety and Health Administration (Cal/OSHA) Serious Injuries: On October 13, 2020, an employee suffered a partial amputation of a finger while operating a hydraulic liftgate on his pickup truck. While raising the liftgate, the employee reached to clear some debris and caught his finger in a pinch point. The employee received medical care at the hospital. The injury was immediately reported, as required, to Cal/OSHA. There was no follow-up investigation by Cal/OSHA. The employee has recovered and returned to work.

On November 4, 2020, a Heavy Transport Operator sustained a serious injury after exiting a portable toilet and falling into a nearby trench on a Pipeline Replacement project. On November 13, 2020, Cal/OSHA opened an investigation into the incident. The Workplace Health and Safety section complied with a document request and coordinated interviews between the Cal/OSHA inspector and personnel involved in the incident. Local 21 and Local 444 representatives attended the interviews. A closing conference was held on February 4, 2021 resulting in a Notice of No Violation being issued to the District. The employee returned to work on modified duty February 9, 2021.

EMERGENCY PREPAREDNESS AND RESPONSE

On October 22, 2020, the District's Emergency Operations Team (EOT) conducted a COVID-19 exercise using Microsoft Teams. Over 250 employees and 10 guests participated. Participants included representatives from Alameda County Water District, Contra Costa Water District, Los Angeles Department of Water and Power, Las Vegas Valley Water District, and Santa Clara Valley Water District, along with members of the District's EOT. The group walked through a facilitated discussion of the chronology of events and lessons learned in the pandemic covering the period from January 2020 through July 2020.