



EAST BAY DISCHARGERS AUTHORITY
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A Joint Powers Public Agency

ITEM NO. 14

OPERATIONS & MAINTENANCE COMMITTEE AGENDA

Tuesday, September 17, 2019

9:00 A.M.

**East Bay Dischargers Authority
2651 Grant Avenue, San Lorenzo, CA 94580**

Committee Members: Cutter (Chair); Walters

OM1. Call to Order

OM2. Roll Call

OM3. Public Forum

OM4. EBDA Performance

(The Committee will be updated on EBDA's NPDES report.)

OM5. Status Report

(The Committee will be updated on EBDA's O&M activities.)

OM6. Adjournment

(Any member of the public may address the Commission at the commencement of the meeting on any matter within the jurisdiction of the Commission. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Commission limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Commission on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom and are to be completed prior to speaking.)

(In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in an Authority meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, please contact the Administrative Assistant at the EBDA office at (510) 278-5910 or kyambao@ebda.org. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the Authority staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.)

(In compliance with SB 343, related writings of open session items are available for public inspection at East Bay Dischargers Authority, 2651 Grant Avenue, San Lorenzo, CA 94580. For your convenience, agenda items are posted on the East Bay Dischargers Authority website located at <http://www.ebda.org>.)

**The next O&M Committee meeting will be held
Tuesday, October 15, 2019, at 9:00 a.m.**

ITEM NO. OM4 EBDA PERFORMANCE

The detailed package is included in the Regulatory Affairs Committee agenda. The NPDES report shows that EBDA continues to operate within the normal compliance range.

Please see the Regulatory Affairs Committee agenda, Item No. RA4 for the July permit compliance data.

ITEM NO. OM5 STATUS REPORT

Alvarado Effluent Pump Station (AEPS)

Pump Cavitation Study & Station Optimization

On July 24, 2019, EBDA had a conference call with Carollo Engineers, Inc. (Carollo) to discuss Carollo's preliminary Cavitation Study findings. The Draft Cavitation Study Project Memorandum is expected shortly.

Hayward Effluent Pump Station (HEPS)

Motor Control Center (MCC) Replacement Project

On August 28, 2019, PG&E completed installation of the new electrical service to HEPS. PG&E delivered and set a new transformer on the pad provided by GSE Construction, Inc. (GSE). New cables were pulled from the existing PG&E pullbox to the transformer, and from the transformer to the new MCC. During the shutdown, PG&E disconnected power to the pump station and the City of Hayward (COH) Hypo Facility and connected the new cables. After the connections were made, PG&E successfully energized the pump station and Hypo Facility. On September 2, 2019, PG&E removed the old pump station transformer, which will allow GSE to continue installation of the new pond influent flow dissipater structure piping from the pump station.

Prior to the shutdown, the COH disinfection channel was drained using the temporary pump station pond diversion pipe. The draining lowered the level in the wet well and allowed COH to perform an entry and visual wet well inspection while the pump station was shut down for PG&E's work. The inspection revealed a crack in the ceiling of the wet well, but most of the structure appeared to be in good condition. Photos of the crack were sent to a Brown & Caldwell structural engineer. The engineer's assessment was that the crack has likely been present from initial construction and does not pose an immediate concern of a structural failure. The engineer did recommend that the crack be addressed in the future to prevent further damage to the rebar in the slab. EBDA staff is discussing with COH staff the possibility of piggybacking this work the next time the City is doing a similar project.

During the PG&E shutdown, GSE also replaced the 20-inch butterfly valve, installed the new valve actuator, and removed the check valve on the Pump No. 1 discharge line. GSE also replaced two 6-inch plug valves on the Surge Tower drain and scum lines.

Central Sierra Electric (Central Sierra) and KBL Associates were on site during and after the PG&E shutdown to test the backup generator and automatic transfer switch. Central Sierra also connected the power and signal wires to the existing Pump No. 1 and the new discharge valve actuator. They worked with Calcon Systems, Inc. (Calcon) and COH staff to check communications to the new Programmable Logic Controller (PLC) and to confirm the new pump station program was performing properly.

On September 5, 2019, a second shutdown was performed to replace the discharge valve and actuator on Pump No. 2. The pump station is now operating automatically with two pumps being controlled by the new PLC and the new MCC.

Oro Loma Effluent Pump Station (OLEPS)

No. 1 & 4 Effluent Pump Discharge Valve Actuator Replacement Project

The installation of the new discharge valve gear drives and actuators for No. 1 & 4 Effluent Pumps is scheduled for the weeks of September 16 & 23, 2019. The installation is scheduled during the normal dry weather wet well preventative maintenance activities.

Electrical Improvements

EBDA staff has been working with ASCO Power Technologies (ASCO) and Beecher Engineering, Inc. (Beecher) on a quote for two new automatic transfer switches (ATS)s to provide an automatic transfer to a second source of standby power for OLEPS such as a portable generator. All of EBDA's existing ATSs are from ASCO.

EBDA staff is continuing to work with Beecher to evaluate options for standby power at OLEPS, with a goal of increasing reliability by augmenting the existing OLEPS standby generator. EBDA has requested that Beecher prepare a report outlining the OLEPS standby power requirements and whether OLSD could provide the required standby power. This option was discussed at the start of OLSD Nutrient Optimization Project and was rejected at the time over concerns that OLSD's standby power was nearing its maximum capacity. On August 28, 2019, a conference call was held with the staffs from EBDA, OLSD and Beecher, on which Beecher presented information that indicates that the option may be feasible. For this option to work, conduits will need to be installed between OLSD's new Blower Building and OLEPS. This area is scheduled to be paved shortly as part of the Nutrient Optimization Project, and the conduits will need to be installed prior to the paving.

Exterior Lighting Upgrade

On August 20, 2019, additional exterior lighting was installed on the Southwest side of OLEPS. A total of five new LED light fixtures were installed on the wall and above the stairs to the lower level. The lighting improvements addressed safety concerns raised by OLSD operations staff.

San Leandro Effluent Pump Station (SLEPS)

No change; all equipment is operational.

Skywest Pump Station

Recycled Water Production

During the month of August 2019, the Skywest Recycled Water System produced 10.3 million gallons of recycled water.

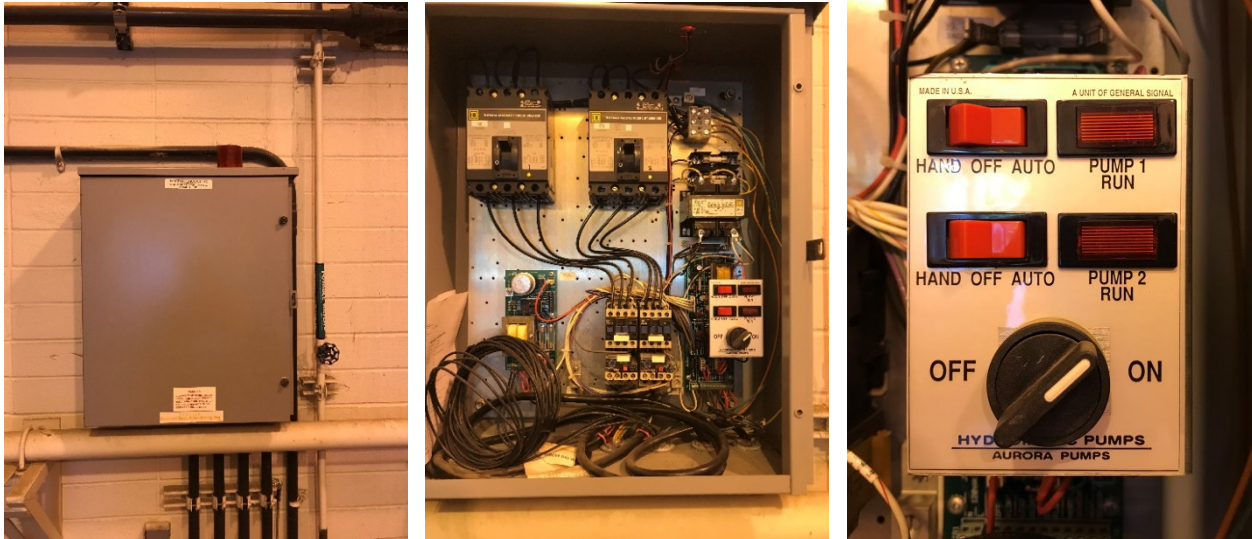
Lighting Upgrade

On August 21, 2019, the lighting at the Skywest Pump Station was replaced with four new LED light fixtures. The old light fixtures were originally installed when the pump station was constructed. The light fixture replacements addressed safety concerns raised by OLSD operations staff.

Marina Dechlorination Facility (MDF)

SBS Building Sump Pump Control Panel Upgrade

The Facilities Electrical Evaluation identified a safety issue related to the SBS building sump pump control panel. To operate the sump pumps manually, staff was required to open the panel to access the “Hand, Off, Auto” switches and run indicator lights. Opening the panel exposed the staff to live voltage. The panel was originally designed this way when it was installed, and in fact this was a common design in the past. Following the recommendation in the Facilities Electrical Evaluation Report, Calcon moved the “Hand, Off, Auto” switches and run indicator lights to the outside of the panel, thus eliminating the safety issue.



MDF SBS Building Sump Pump Control Panel – Before Upgrade



MDF SBS Building Sump Pump Control Panel – After Upgrade

Force Main

Rain Water Entering Manholes

EBDA staff has been working with the City of San Leandro (CSL) force main crew to locate and address the issue of rain water entering manholes from the surface. One such manhole was located behind a warehouse on Cabot Boulevard in Hayward. EBDA received a USA ticket indicating that a contractor was going to conduct patch asphalt repairs in the area of the EBDA force main behind the warehouse. After meeting with the contractor, he agreed to address the issue of surface rain water entering the EBDA manhole and redirect the water to a nearby surface drain.

Operations Center

Cyber Security

On August 13, 2019, EBDA staff provided comments to Woodard & Curran on the Draft IT/SCADA System Cybersecurity Vulnerability Assessment Report. The Final Report is expected shortly. The first Quarterly Network Security Management & Coordination meeting is scheduled for October 8, 2019. The meeting will be attended by EBDA, OLSD, Woodard & Curran, Calcon (EBDA's SCADA consultant) and Cayuga Information Systems (EBDA's business IT consultant). The meeting objectives are to establish communication channels, develop a common understanding of upcoming projects and potential interactions, and outline the future network architecture. The agenda for the first meeting includes discussion of network security and remote access issues for EBDA's new SCADA system and EBDA's communication system upgrade.

SCADA System Upgrade Project

On August 12, 2019, EBDA staff started using the new SCADA system. Calcon still has several items to address before the project is completed. The outstanding items include installing the new system at MDF and completing the report-generating component. The SCADA view-only client is now online. Currently, only EBDA staff has the ability to view it. After network security issues are addressed, the client will be viewable by Member Agency staff and on-call Operators.

Communication System Upgrade

In 2017, EBDA started a project to replace the serial port radios used for data communication between EBDA facilities. The project was put on hold shortly after it was started due to a number of considerations, including evaluation of whether internet or radio was a more appropriate technology to meet EBDA's needs. With the new HEPS MCC going online, the timing was optimal to replace the communications between HEPS, OLEPS, and the Operations Center. On August 21, 2019, three new ethernet radios were installed, one on the HEPS Surge Tower, one on the OLEPS Surge Tower, and one at the Operations Center. This project will be paid for out of RRF contingency funds, and the technology and approach will be evaluated to inform decisions on additional communication upgrades. The full Communication System Upgrade will be included in the RRF project list in the next several fiscal years. EBDA's AMP lists the project in the year 2021.

Miscellaneous Items

Underground Service Alerts

EBDA received twenty-seven (27) Underground Service Alert (USA) tickets during the month of August 2019. Four required field verification.

Special Projects

Transport System Seismic Reliability Plan

On September 3, 2019, Brown & Caldwell (BC) submitted a preliminary draft of the Transport System Seismic Reliability Plan. The draft permitting section had previously been forwarded to Kermani Consulting Group to be incorporated in EBDA's Disaster Cost Recovery Plan. Staff is reviewing the full Draft Transport System Seismic Reliability Plan and providing feedback to BC.

EBDA Facilities Electrical Evaluation

On August 23, 2019, EBDA staff met with Todd Beecher from Beecher Engineering, Inc. to provide comments to be incorporated in the draft report. A final draft will be delivered following completion of the OLEPS standby power assessment discussed above.

Disaster Cost Recovery Planning Services

EBDA staff is continuing to work with Kermani Consulting Group (KCG) on disaster cost recovery planning. KCG delivered an updated draft of EBDA's Disaster Cost Recovery Plan for review on August 14, 2019, which incorporates staff's feedback on the initial July draft. Staff is in the process of reviewing the latest draft. Following refinement of the Plan, the project will conclude with an overview session for member agency staff, likely in early 2020, per the MAC's request.

Advanced Quantitative Precipitation Information (AQPI) Project

As discussed previously, AQPI is a Bay Area regional project funded by the California Department of Water Resources (DWR) aimed at improving prediction of precipitation, streamflow, and storm surge through data gathering and model improvement. EBDA is part of a consortium of East Bay agencies working to install a permanent radar in time for the 2019/20 wet season. The plan is for each of the participating agencies to approve a Memorandum of Understanding (MOU) with Sonoma Water as the contracting agency. The MOU would commit to funding the installation through the end of the grant in December 2021. EBDA staff is still waiting for all agencies to complete legal review on the MOU document, and then will bring the MOU to the Commission for consideration. Based on the most recent negotiation, the EBDA contribution to this two-year project is \$29,000, which is included in EBDA's FY2019/20 budget.

It is expected that a broader regional MOU or JPA will be developed for post-grant funding beyond 2021. EBDA staff is representing the East Bay agencies in a regional committee that is beginning to discuss the long-term funding and governance plan. The group is working on a Planning Agreement that staff would sign by November 2019, documenting intent to work together toward a long-term agreement. The Planning Agreement would contain no funding commitments.

EAST BAY DISCHARGERS AUTHORITY
MONTHLY OPERATION AND MAINTENANCE REPORT
Aug-2019

1. Summary sheets from the NPDES Report submitted to the RWQCB and EPA are attached for the month of: Jul-19
2. Number of violations reported in the above NPDES Report: **None to Report**
3. The violations included the following: **None Noted**
4. Preventive Maintenance for the month of: Jul-19

LOCATION	NO. TASKS SCHEDULED	NO. TASKS COMPLETED	# TASKS UNFINISHED	PERCENT COMPLETED
San Leandro Pump Station	12	12	0	100%
Oro Loma Pump Station	54	54	0	100%
Sky West Pump Station	14	14	0	100%
Hayward Pump Station	24	24	0	100%
Alvarado Pump Station	30	30	0	100%
Marina Dechlorination Facility	99	99	0	100%
EBDA Responsibility	26	26	0	100%
Force Main - USD	4	4	0	100%
Force Main - San Leandro	68	68	0	100%
Total	331	331	0	100%

5. Unscheduled Maintenance for the month of: Aug-19

LOCATION	NO. OF WORK ORDERS
San Leandro Pump Station	0
Oro Loma Pump Station	1
Hayward Pump Station	0
Alvarado Pump Station	0
Marina Dechlorination Facility	1
Skywest Pump Station	1
Force Main	1

6. Other Items of significance: Aug-19

- a. FM: Transport System Seismic Reliability Plan / Addressing Rain Water Entering Manholes
- b. AEPS: Pump Cavitation Study & Station Optimization
- c. OLEPS: Effluent Pumps No. 1 & 4 Discharge Valve Actuators & Gear Drives / Exterior Lighting
- d. MDF: SBS Building Sump Pump Control Panel Upgrade
- e. HEPS: MCC Replacement Project
- f. SLEPS: No Items