



EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
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A Joint Powers Public Agency

ITEM NO. 13

OPERATIONS & MAINTENANCE COMMITTEE AGENDA

Tuesday, December 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. Resolution Authorizing the General Manager to Issue a Purchase Order to Pump Repair Service Company in the Amount of \$32,961 for a Replacement Impeller for Effluent Pump No. 6 at the Alvarado Effluent Pump Station

(The Committee will consider a resolution to issue a purchase order.)

OM7. 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, January 14, 2020, at 9:00 a.m.**

ITEM NO. OM4 EBDA PERFORMANCE

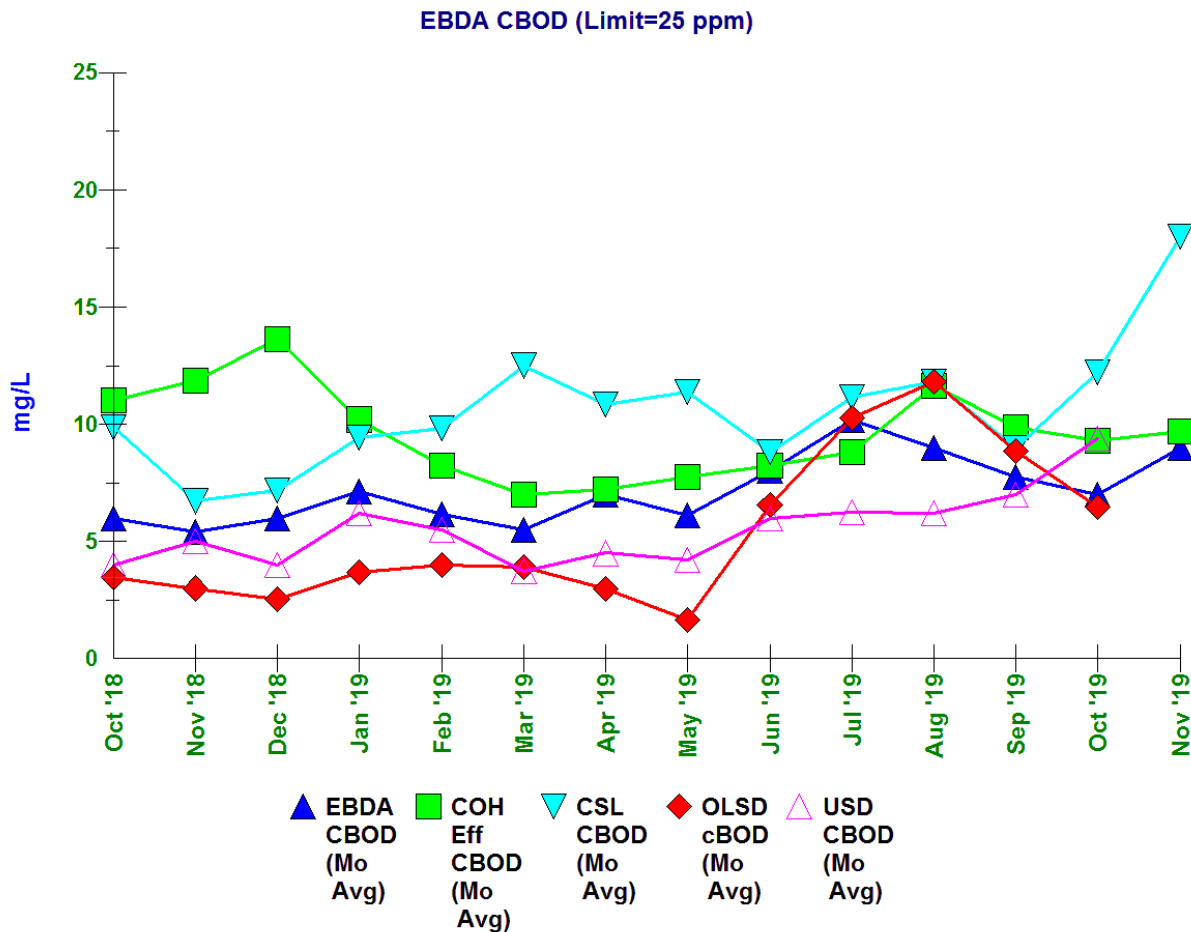
Recommendation

For the Committee’s information only; no action is required.

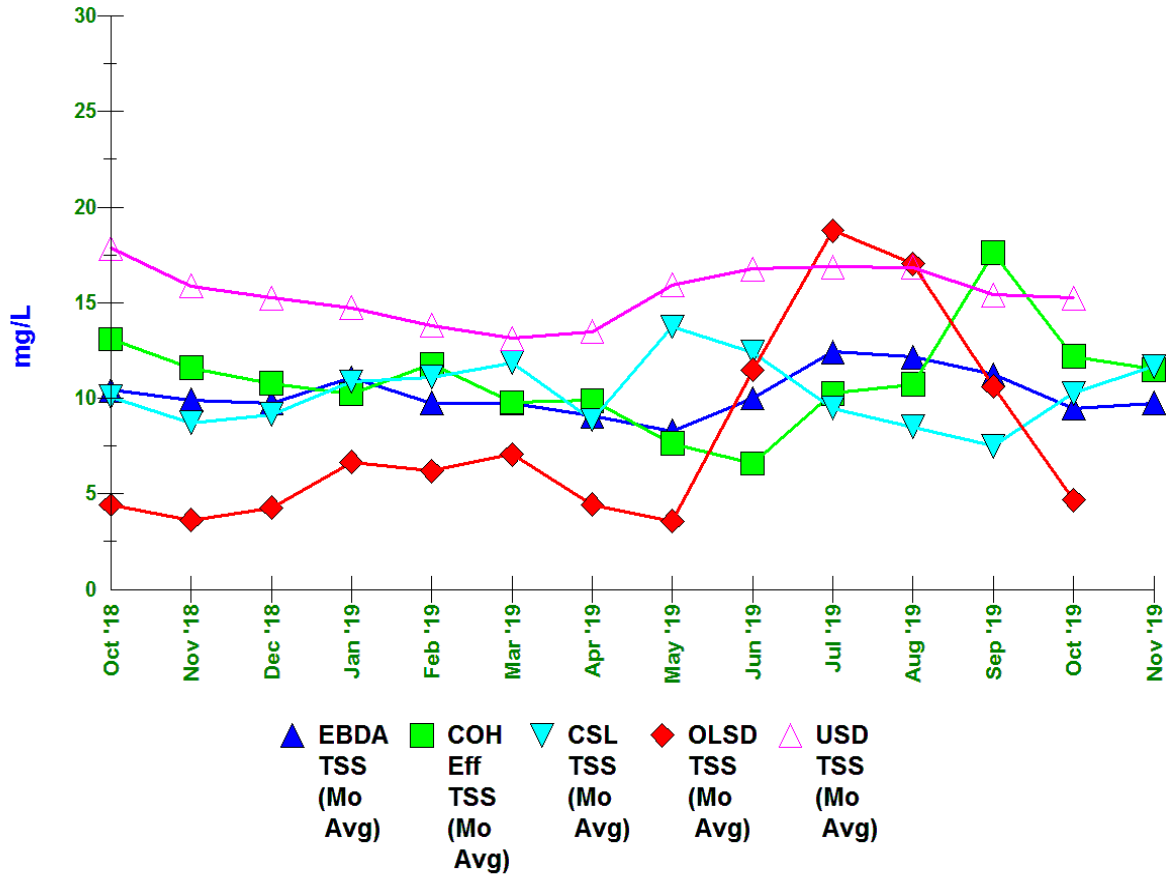
Permit Compliance Issues

There were no NPDES permit violations in October and preliminary data from November are also free of permit exceedances. Member Agency CBOD and TSS performance are shown below. A table with bacterial indicators is also included.

As noted previously, bacterial regrowth tends to accelerate as the weather warms in the summer months, and staff kept chlorine dosing high to ensure that high bacteria results were not detected. At the beginning of November, despite cooling weather, one high result for fecal coliform was observed. EBDA’s fecal coliform limit is expressed as a 90th percentile, with the expectation that one high result can be discarded as anomalous. Staff maintained a high residual for the remainder of November to ensure that no additional high values were detected and conducted training on maintenance activities for sampling equipment to prevent future occurrences.



EBDA TSS (Limit 30 ppm)



EBDA Bacterial Indicators

	FECAL	ENTERO
Date	MPN/ 100mL	MPN/ 100mL
Limit (Geomean)	500	240
Jan 2019, Geomean	6	3
Feb 2019, Geomean	3	3
Mar 2019, Geomean	7	2
April 2019, Geomean	7	< 2
May 2019, Geomean	14	2
June 2019, Geomean	16	3
July 2019, Geomean	9	< 3
August 2019, Geomean	32	< 3
Sept 2019, Geomean	12	3
10/1/2019	13	2
10/2/2019	4	2
10/7/2019	10	6
10/8/2019	33	3
10/9/2019	350	< 2
10/14/2019	33	2
10/15/2019	33	2
10/21/2019	360	< 2
10/22/2019	120	< 2
10/28/2019	13	2
10/29/2019	23	2
Oct 2019, Geomean	35	2
11/4/2019	3447	4
11/5/2019	17	2
11/6/2019	220	< 2
11/11/2019	101	< 2
11/12/2019	22	2
11/13/2019	4	2
11/18/2019	12	8
11/19/2019	23	2
11/20/2019	17	2
11/25/2019	4	< 2
11/26/2019	17	< 2
Nov 2019, Geomean	32	2

ITEM NO. OM5 STATUS REPORT

Alvarado Effluent Pump Station (AEPS)

Pump Cavitation Study & Station Optimization

On December 9, 2019, EBDA staff provided comments to Carollo Engineers, Inc. (Carollo) on the Draft Cavitation Study Project Memorandum. After Carollo incorporates staff comments, it will be sent to the MAC for review and a meeting will be scheduled with USD staff to review the memorandum.

Effluent Pump No. 6 Refurbishment

Staff is recommending approval of a resolution authorizing the General Manager to issue a purchase order to Pump Repair Service Company (PRS) in the amount of \$32,961 for a replacement impeller for Effluent Pump No. 6. See Item No. OM6.

Hayward Effluent Pump Station (HEPS)

Motor Control Center (MCC) Replacement Project

In November, GSE Construction, Inc. (GSE) installed two additional storm drain catch basins. The existing grade around the pump station and MCC building is flat, so the catch basins were added to reduce the potential for rain water pooling on the new asphalt. On November 21, 2019, GSE's paving subcontractor, Ransome Company (Ransome), completed paving. Ransome worked with EBDA staff to establish slopes and final grades around the site.

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New HEPS Pavement

A contract change order has been written to add the catch basins and to increase the paving area to the north of the new MCC building to improve vehicle access. The change order includes a credit to remove overlay of existing asphalt south of the pump station.

GSE also installed an added 24-inch steel spool piece adjacent to the isolation valve on the HEPS effluent diversion pipe to the ponds. The design shows the valve connected to 24-inch steel pipe on one side and 24-inch HDPE pipe on the other. HDPE pipe has a smaller inside diameter than steel pipe for the same nominal pipe size. The spool piece was needed to increase the inside diameter of the pipe at the connection and allow the disc of the butterfly valve to rotate. GSE will also be installing a pipe support under the new 24-inch steel spool.



Before 24-Inch Steel Spool

After 24-Inch Steel Spool

Upcoming work on the site includes installation of perimeter fencing with barbed wire around the pump station and MCC building. GSE will also install new stairs into the MCC building and a new platform around the generator to improve future access for operations and maintenance activities. GSE's coatings subcontractor, Redwood Painting Co. Inc., will paint the station piping when weather conditions allow.

Oro Loma Effluent Pump Station (OLEPS)

Electrical Improvements

In November, the contractor working on OLSD's Nutrient Optimization Project completed installation of the #1 water line to supply water from OLSD to the OLEPS safety shower and eyewash station. The contractor also continued the installation of two electrical conduits and a two-inch #4 water line from OLSD to OLEPS. The underground portion of the conduit and water line installation is now complete. It was critical that this portion of the work be completed prior to the paving between OLSD and OLEPS.

Paving Repair/Upgrade

As part of the Renewal and Replacement Fund Project List for Fiscal Year 2018/2019, \$25,000 was budgeted to repair/replace the asphalt behind OLEPS, next to the 8,000 gallon above ground diesel storage tank. This work was to be included as part of OLSD's plant paving project, which has been postponed until after the Nutrient Optimization Project.

As part of the Nutrient Optimization Project, the area between OLSD and OLEPS is going to be paved. Paving started on December 10, 2019. EBDA has agreed to pay OLSD for the portion of the asphalt that is exclusively used to access OLEPS. The area is approximately 1,150 square feet and the cost to EBDA will not exceed \$7,000. A portion of the previously budgeted \$25,000 will be used to fund this paving. As part of the Renewal and Replacement Fund Project List for Fiscal Year 2020/2021, staff will include the funds necessary to complete the paving behind OLEPS.

San Leandro Effluent Pump Station (SLEPS)

No change; all equipment is operational.

Skywest Pump Station

Recycled Water Production

During the month of November 2019, the Skywest Recycled Water System produced 1.6 million gallons of recycled water. Due to the start of wet weather, the last day of operation for the system this year was November 21, 2019.

Marina Dechlorination Facility (MDF)

No change; all equipment is operational.

Force Main

No change; all equipment is operational.

Operations Center

Cyber Security

The next Quarterly Network Security Management & Coordination meeting is tentatively scheduled for January 9, 2020. EBDA staff, Woodard & Curran, Calcon (EBDA's SCADA consultant) and Cayuga Information Systems (EBDA's business IT consultant) continue to work to improve the security of EBDA's SCADA and business networks.

Miscellaneous Items

Underground Service Alerts

EBDA received eighteen (18) Underground Service Alert (USA) tickets during the month of November 2019. Four required field verification.

Special Projects

PG&E Large Integrated Audit Program

EBDA is participating in PG&E's Large Integrated Audit (LIA) program. The LIA Program is a PG&E-sponsored assessment of customer facilities, with a goal of an energy action plan that identifies and prioritizes potential energy and demand savings from energy conservation, energy efficiency, time-of-use management, demand response, and self-generation measures. EBDA's study is being conducted by Alternative Energy Systems Consulting, Inc. A site visit/walk was conducted on October 10, 2019, and EBDA staff is currently gathering data to provide to the consultant for their analysis.

Transport System Seismic Reliability Plan

Brown & Caldwell (BC) submitted a preliminary draft of the Transport System Seismic Reliability Plan. Staff is reviewing the draft and providing feedback to BC.

EBDA Facilities Electrical Evaluation

Beecher Engineering, Inc. will provide a final draft of the EBDA Facilities Electrical Evaluation Report following the incorporation of the OLEPS Standby Power Assessment Report.

Disaster Cost Recovery Planning Services

EBDA staff is continuing to work with Kermani Consulting Group (KCG) on disaster cost recovery planning. In November, staff provided feedback on KCG's second draft plan. KCG will be finalizing the plan, and the project will conclude with an overview session for member agency staff in early 2020.

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. 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. The EBDA contribution to

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this two-year project is \$29,000, which is included in EBDA's FY2019/2020 budget. The current target is for the East Bay radar to be installed by March 2020. The application for lease of the site from American Tower has been submitted, the Federal Communications Commission and East Bay Parks Encroachment Permits have been approved, and the X-band Radar is ready for deployment as soon as agreements are in place.

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 in early 2020, documenting intent to work together toward a long-term agreement. The Planning Agreement would contain no funding commitments. The next meeting of the regional committee is scheduled for January 15, coinciding with a ribbon-cutting ceremony for the radar installation at Santa Clara Valley Water District.

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

1. Summary sheets from the NPDES Report submitted to the RWQCB and EPA are attached for the month of: Oct-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: Oct-19

LOCATION	NO. TASKS SCHEDULED	NO. TASKS COMPLETED	# TASKS UNFINISHED	PERCENT COMPLETED
San Leandro Pump Station	11	11	0	100%
Oro Loma Pump Station	37	37	0	100%
Sky West Pump Station	13	13	0	100%
Hayward Pump Station	15	15	0	100%
Alvarado Pump Station	45	45	0	100%
Marina Dechlorination Facility	40	40	0	100%
EBDA Responsibility	57	57	0	100%
Force Main - USD	4	4	0	100%
Force Main - San Leandro	55	55	0	100%
Total	277	277	0	100%

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

LOCATION	NO. OF WORK ORDERS
San Leandro Pump Station	0
Oro Loma Pump Station	2
Hayward Pump Station	0
Alvarado Pump Station	0
Marina Dechlorination Facility	1
Skywest Pump Station	1
Force Main	0

6. Other Items of significance: Nov-19

- a. FM: Transport System Seismic Reliability Plan
- b. AEPS: Effluent Pump No. 6 Refurbishment
- c. OLEPS: Electrical Improvements / New Water Lines
- d. MDF: No Items
- e. HEPS: MCC Replacement Project
- f. SLEPS: No Items

ITEM NO. OM6 RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO PUMP REPAIR SERVICE COMPANY IN THE AMOUNT OF \$32,961 FOR A REPLACEMENT IMPELLER FOR EFFLUENT PUMP NO. 6 AT THE ALVARADO EFFLUENT PUMP STATION

Recommendation

Approve the resolution authorizing the General Manager to issue a purchase order to Pump Repair Service Company (PRS) in the amount of \$32,961 for a replacement impeller for Effluent Pump No. 6 at AEPS.

Background

On October 16, 2019, USD staff reported to EBDA that AEPS Effluent Pump No. 6 needed to be rebuilt. USD maintenance staff disassembled the pump and found impeller damage. USD temporarily repaired the impeller and sent it out to be balanced. The repaired impeller will be installed and the pump should be reassembled the week of December 9, 2019, so that it is available for wet weather.

EBDA obtained a quote for the replacement impeller from PRS in the amount of \$32,961. PRS was selected because they are an authorized distributor, reseller, and qualified service facility for Fairbanks Morse pumping equipment in the Northern California territory.

PRS also provided EBDA with replacement impeller quotes for this pump in October of 2009 and November of 2015. The quotes were \$25,903 and \$29,795, respectively. At those times, EBDA elected to repair the old impeller. Due to the severity of the damage, the temporary impeller repair is only expected to last a short time (this wet season), and therefore staff recommends replacement as the permanent fix.

The new impeller has a lead time of 12 to 16 weeks.

 **PUMP REPAIR SERVICE CO.**

November 20, 2019

East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580-1841

Attn: Howard Cin

**SUBJECT: UNION SANITARY #6 FAIRBANK MORSE EFFLUENT
SEWAGE PUMP**

Dear Howard,

We are pleased to provide you with a quote on the replacement impeller.

1 - 21.4 OD trim 3-vane high nickel iron impeller, with dynamic balancing	\$28,670.00
Estimated freight.....	1,500.00
Sales tax 9 ¼%	2,790.72
Total.....	\$32,960.72
Estimated Delivery.....	12 Weeks

If you have any questions on the above, please give me a call.

Sincerely,



Wayne Archer

WA/dm

ESTABLISHED 1941

EAST BAY DISCHARGERS COMMISSION
EAST BAY DISCHARGERS AUTHORITY
ALAMEDA COUNTY, CALIFORNIA

RESOLUTION NO. 19-46

INTRODUCED BY _____

RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO PUMP REPAIR SERVICE COMPANY IN THE AMOUNT OF \$32,961 FOR A REPLACEMENT IMPELLER FOR EFFLUENT PUMP NO. 6 AT THE ALVARADO EFFLUENT PUMP STATION

WHEREAS, the East Bay Dischargers Authority requested a quote from Pump Repair Service Company (PRS) for a replacement impeller for Effluent Pump No. 6 at AEPS; and

WHEREAS, staff has determined that Effluent Pump No. 6 at AEPS is critical to meet EBDA system reliability and that replacing its impeller is necessary; and

WHEREAS, staff has determined that the quote from PRS is a qualified, responsive and responsible quote; and

WHEREAS, PRS is an authorized Fairbanks Morse pumping equipment distributor in the Northern California territory and has provided EBDA with excellent service, in-depth pumping unit knowledge, and warranty follow-up when requested; and

WHEREAS, the Operations & Maintenance Committee has recommended approval of a purchase order to PRS.

NOW, THEREFORE BE IT RESOLVED, the Commission of the East Bay Dischargers Authority hereby accepts the quote from PRS.

BE IT FURTHER RESOLVED, the General Manager is hereby authorized to issue a purchase order on behalf of the Authority in the amount of \$32,961 to Pump Repair Service Company in accordance with the accepted quote.

SAN LORENZO, CALIFORNIA, DECEMBER 19, 2019, ADOPTED BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSENT:
ABSTAIN:

CHAIR
EAST BAY DISCHARGERS COMMISSION

ATTEST: _____
GENERAL MANAGER
EAST BAY DISCHARGERS AUTHORITY
EX OFFICIO SECRETARY