



EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

A Joint Powers Public Agency

NOTICE: In compliance with AB 361 (2021), the meeting scheduled below will be conducted virtually via Zoom video conferencing.

- Members of the public may participate in the meeting by clicking on the following Zoom link: <https://us02web.zoom.us/j/83944888857>
- You may also participate via telephone by dialing 1(669) 900-6833 and entering Meeting ID number 839 4488 8857.

ITEM NO. 13

OPERATIONS & MAINTENANCE COMMITTEE AGENDA

Wednesday, January 18, 2023

10:00 A.M.

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

Committee Members: Johnson (Chair); Acevedo

OM1. Call to Order

OM2. Roll Call

OM3. Public Forum

OM4. EBDA Permit Compliance
(The Committee will be updated on EBDA's NPDES compliance.)

OM5. Status Report
(The Committee will be updated on EBDA's O&M activities.)

OM6. Motion Awarding the HEPS Pump Replacement Project to Pump Repair Service Company, Inc. for a Contract Value not to Exceed \$725,900 and Authorizing the General Manager to Negotiate a Negative Change Order
(The Committee will consider approval of the contract award.)

OM7. Motion Authorizing the General Manager to Execute an Amendment to Work Order 2 Under the Professional Services Agreement with Currie Engineers, Inc. in the Amount of \$18,930 for a Total Work Order Value of \$38,247 for Project and Construction Management Services
(The Commission will consider approval of the contract amendment.)

OM8. 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

Agenda Explanation
East Bay Dischargers Authority
O&M Agenda
January 18, 2023

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, contact Juanita Villaseñor at juanita@ebda.org or (510) 278-5910. 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
Monday, February 13, 2023, at 9:00 a.m.**

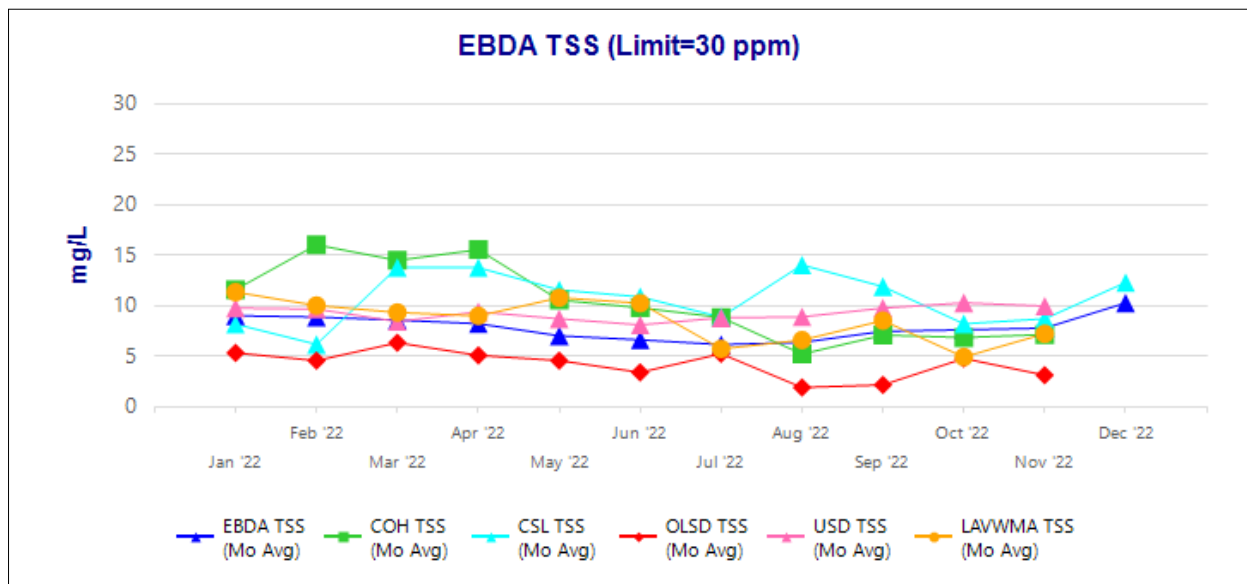
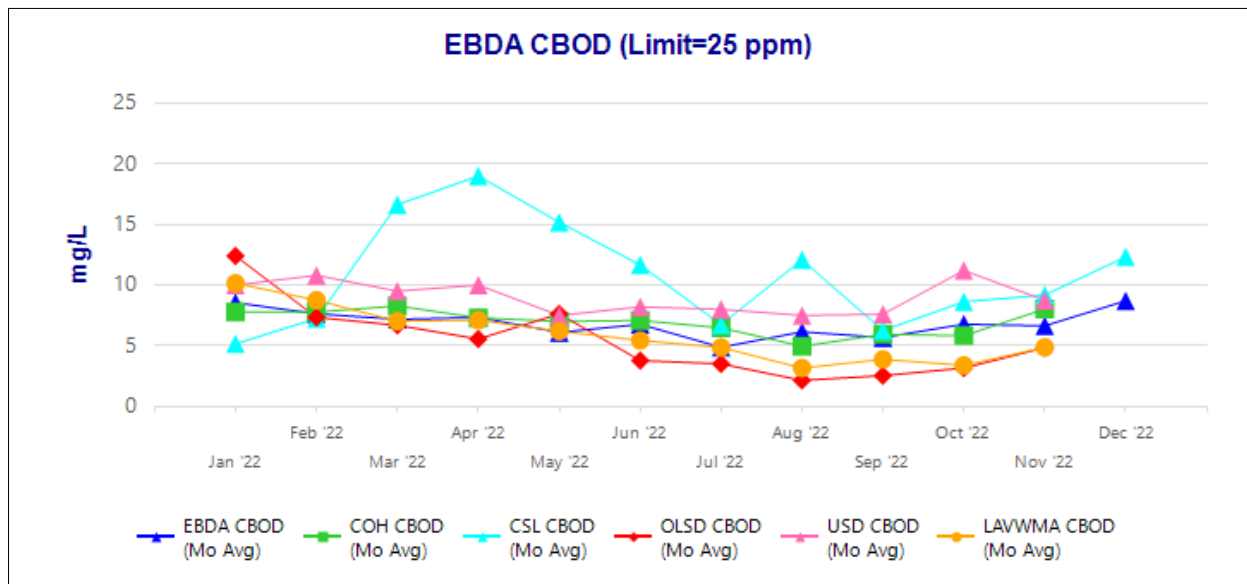
ITEM NO. OM4 EBDA PERMIT COMPLIANCE

Recommendation

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

Discussion

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



EBDA Bacterial Indicators

Date	FECAL	ENTERO
	MPN/ 100mL	MPN/ 100mL
Limit (90th Percentile)	1100	1100
Limit (Geomean)	500	280
January 2022 Geomean	4	2
February 2022 Geomean	6	6
March 2022 Geomean	7	4
April 2022 Geomean	2	7
May 2022 Geomean	5	48
June 2022 Geomean	5	57
July 2022 Geomean	20	6
August 2022 Geomean	15	34
September 2022 Geomean	43	28
October 2022 Geomean	12	4
11/1/2022	2	10
11/2/2022	NA	6
11/7/2022	17	12
11/8/2022	540	6
11/14/2022	4	8
11/15/2022	4	4
11/21/2022	4	15
11/22/2022	< 2	4
11/28/2022	2	6
11/29/2022	4	2
November 2022 Geomean	6	6
12/5/2022	79	4
12/6/2022	6	6
12/7/2022	NA	6
12/12/2022	13	6
12/13/2022	4	16
12/14/2022	NA	16
12/19/2022	11	< 2
12/20/2022	8	6
12/26/2022	1100	6
12/27/2022	14	263
December 2022 Geomean	21	9

ITEM NO. OM5 STATUS REPORT

Union Effluent Pump Station (UEPS)

Effluent Pump No. 6 Variable Frequency Drive (VFD)

On December 29, 2022, the VFD for Effluent Pump No. 6 failed. USD maintenance staff ordered new fuses and is scheduling Rockwell Automation Field Service to further troubleshoot the issue.

Hayward Effluent Pump Station (HEPS)

Effluent Pump Replacement Project

Staff is requesting authority to award the project to Pump Repair Service Company, Inc. for replacement of the four pumps. See Item No. OM6.

Oro Loma Effluent Pump Station (OLEPS)

Emergency Outfall Upgrade

Carollo Engineers (Carollo) completed an evaluation of the OLEPS emergency outfall to determine the outfall's maximum capacity and whether modifications to the outfall weir would increase system detention time and delay or prevent an unanticipated bypass in the event of a catastrophic failure at OLEPS. Carollo recommended that the existing lumber weir be replaced with a permanent concrete weir at an increased elevation. On September 16, 2022, Carollo completed the drawing and specifications that will be used for construction of the new elevated weir. Staff is in the process of requesting bids for this project from contractors.

Main Electrical Switchboard Upgrade

There are two outstanding items that still need to be addressed prior to completing the OLEPS Main Electrical Switchboard Upgrade Project. Schneider Electric, the project contractor, must fabricate and install new blanks or spacers to cover the space between the new breakers and the front panels. Schneider Electric also needs to issue a credit of approximately \$4,800 to reimburse EBDA for expenses incurred during the June 23, 2022, shutdown that was cancelled due to their oversights.

Skywest Pump Station

Recycled Water Production

During the month of December 2022, the Skywest Recycled Water System did not produce any recycled water. The total recycled water produced during 2022 was 9.96 MG. The peak day of recycled water production in 2022 was 564,900 gallons. A summary of the monthly recycled water produced for the last seven years is shown below:

Skywest Total Recycled Water							
	2022 Total Flow MG	2021 Total Flow MG	2020 Total Flow MG	2019 Total Flow MG	2018 Total Flow MG	2017 Total Flow MG	2016 Total Flow MG
January	0.00	0.89	0.00	0.00	0.00	0.00	0.00
February	1.08	0.00	1.65	0.00	2.37	0.00	0.41
March	0.00	0.00	0.53	0.00	0.73	0.25	0.00
April	1.10	1.06	2.64	3.91	1.86	1.80	6.51
May	1.00	1.12	2.53	5.77	9.38	12.00	12.71
June	1.12	2.64	2.00	9.57	12.50	10.97	16.73
July	1.10	2.10	1.10	11.40	12.12	11.98	16.42
August	1.52	2.16	1.09	10.34	10.59	10.41	13.81
September	1.00	1.60	1.37	8.30	7.45	8.12	11.29
October	1.03	0.49	1.10	6.22	6.14	5.58	3.60
November	1.01	0.00	1.43	1.64	2.24	0.00	2.02
December	0.00	0.00	0.00	0.00	0.00	1.24	0.00
Total	9.96	12.06	15.44	57.15	65.38	62.35	83.50

Marina Dechlorination Facility (MDF)

On December 31, 2022, at 2:15 pm, MDF experienced a PG&E power failure that lasted 36 hours. During the power failure, the facility's emergency generator operated without incident. Although MDF is normally an unmanned facility, during the power failure, EBDA and San Leandro staff manned the facility out of an abundance of caution. San Leandro maintenance staff also fueled the emergency generator every six hours during the power failure. Because of the criticality of this facility, several layers of redundancy are in place for the power systems. If the emergency generator had failed, uninterruptible power supply (UPS) units would have provided temporary power, allowing time for staff to start a portable generator to provide power to the station's control system and SBS pumps.

Force Main

No change; all equipment is operational.

Operations Center

No change; all equipment is operational.

Miscellaneous Items

Underground Service Alerts

EBDA received seven (7) Underground Service Alert (USA) tickets during the month of December 2022. Four required an Electronic Positive Response (EPR) and calls/emails to the excavators, and one required field verification.

Wet Weather

Total rainfall for the month of December 2022 (in inches) was as follows:

Oakland	Hayward	Livermore
11.96	10.52	8.09

Significant daily rainfall for the month of December 2022 (in inches) was as follows:

Date	Oakland	Hayward	Livermore
12/03/2022	0.89	0.84	0.79
12/10/2022	1.14	1.31	1.23
12/26/2022	0.88	0.66	0.46
12/27/2022	1.11	1.07	0.97
12/29/2022	0.67	0.68	0.25
12/30/2022	0.95	0.78	0.33
12/31/2022	5.01	3.98	3.34

An atmospheric river storm event hit the EBDA service area on December 31, 2022. The MDF peak flow of 192.5 MGD was recorded at 2:40 pm. The average daily flow at MDF was 153.3 MGD on December 31st and 141.1 MGD on January 1st. For reference, the average daily flow for the month of November 2022 was 63.6 MGD, and the average daily flow for October 2022 was 56.6 MGD. During the peak of the storm, one OLEPS diesel pump operated for 22.6 hours, and a second OLEPS diesel pump operated for 9.4 hours, concurrently. Overall, the EBDA system performed remarkably well, given the conditions, demonstrating the value of EBDA, both in terms of the supportive community and the infrastructure. There was consistent communication and cooperation between the Member Agencies, LAVWMA, and EBDA to manage flows, and mutual aid in the form of pumps and emergency equipment was provided among the Member Agencies. The following paragraphs summarize how flows from each plant were managed during the December 31st storm.

USD

USD had a peak influent flow of 68.5 MGD and a sustained influent flow of 63 MGD. During the peak of the storm, USD used its Old Alameda Creek outfall and kept its 3-hour average maximum flow rate to EBDA under 42.9 MGD, USD's Joint Powers Agreement (JPA) maximum flow rate capacity.

Hayward

The City of Hayward had a sustained influent flow of over 42 MGD. During the peak of the storm, Hayward voluntarily diverted all of its effluent flow to the Hayward Ponds. After the peak of the storm, EBDA requested additional flow from Hayward.

LAVWMA

LAVWMA had a sustained flow to EBDA over the course of the storm of 36 MGD. During peak flows and high tide, EBDA requested that LAVWMA reduce their flow because the

two OLEPS diesel pumps were operating at 100% and the OLEPS wet well level was increasing.

OLSD/CVSan

OLSD/CVSan had a sustained influent flow of over 100 MGD. While they initially sent all of their effluent flow to EBDA, at around 3:15 pm, OLSD/CVSan started using their near shore outfall and reduced their flow to EBDA from approximately 85 MGD to 55 MGD. Per the JPA, OLSD/CVSan's maximum flow rate capacity is 30 MGD over a 3-hour average. OLSD/CVSan exceeded their 3-hour average maximum flow rate capacity for over 24 hours, with an average flow rate during the first 24-hour period of 59.9 MGD. Because this was OLSD/CVSan's first capacity exceedance event of the fiscal year, capacity exceedance fees will not be assessed for the excess 29,900,000 gallons that OLSD/CVSan sent to EBDA during the initial 24-hour period. OLSD/CVSan will be charged exceedance fees for flows over 30 MGD following the initial 24-hour period. Additional details will be provided in the February agenda packet.

San Leandro

San Leandro had a peak influent flow of over 30 MGD. Per the JPA, San Leandro's maximum flow rate capacity is 14 MGD over a 3-hour average. San Leandro exceeded its 3-hour average maximum flow rate capacity for a total of 20 hours and 45 minutes, with an average flow rate during that period of 22.3 MGD. Because this was San Leandro's first capacity exceedance event of the fiscal year, no capacity exceedance fees will be assessed on the 7,176,000 excess gallons that San Leandro sent to EBDA. San Leandro will be charged exceedance fees for flows over 14 MGD for subsequent storms. Due to excessive flows during the storm, San Leandro's primary clarifiers and other process units overtopped, flooding the plant site. In order to protect critical equipment, flood waters were pumped for a short time directly into the chlorine contact tank. This was reported to the Regional Water Quality Control Board (Water Board) as an unanticipated bypass under EBDA's NPDES permit, which is allowed under extreme circumstances such as those that occurred during the storm.

EBDA Vehicle

On September 16, 2022, a Purchase Order was submitted to National Auto Fleet Group for EBDA's new F-150 Truck. On September 26, 2022, staff traded in EBDA's 2008 Ford Ranger for \$9,100. Due to the high trade-in value, it was necessary to trade-in the truck as soon as possible before the trade-in value was reduced. The new F-150 is on order, and EBDA is waiting for an estimated delivery date from Ford.

Special Projects

Roof Replacement Projects

During the week of December 19th, the old OLEPS roof was removed and several layers of the new roof were installed. Installation of these layers made the roof water tight. Before additional layers of the new roof can be installed, a waiting period of several weeks is necessary. The roof will therefore be completed following the current wet weather.

Cargill Brine Project

Staff is continuing to work with the Authority's CEQA consultant, Ascent Environmental, on preparation of the Environmental Impact Report (EIR) for the project. A draft of the EIR was released for public comment on January 3, 2023. Information about the project and the CEQA process, including a link to the Draft EIR, can be found here: <https://ebda.org/projects/cargill-partnership/>. A public meeting to review the Draft EIR will be held via zoom at 6pm on Tuesday, January 24, 2023.

Staff has begun negotiations with Cargill on a Project Development and Operating Agreement, which would be brought to the Commission for consideration coincident with EIR certification, likely in Spring 2023. A draft technical addendum has been developed that outlines water quality limitations and monitoring requirements to ensure EBDA's continued compliance with our NPDES permit once brine discharge commences. The addendum will also include a corrosion monitoring plan, with triggers for action if accelerating corrosion is observed.

Advanced Quantitative Precipitation Information (AQPI) Project

The regional AQPI project continues to move forward with a goal of improving prediction of rainfall events in the Bay Area. Following a series of delays, the East Bay radar was installed at Rocky Ridge on the week of December 6, 2022. Photos of the installation are below. The system is now being commissioned and tested. In the meantime, EBDA members are able to access regional data through AQPI's data portal.

Agenda Explanation
East Bay Dischargers Authority
O&M Agenda
January 18, 2023





ITEM NO. OM6 MOTION AWARDING THE HEPS PUMP REPLACEMENT PROJECT TO PUMP REPAIR SERVICE COMPANY, INC. FOR A CONTRACT VALUE NOT TO EXCEED \$725,900 AND AUTHORIZING THE GENERAL MANAGER TO NEGOTIATE A NEGATIVE CHANGE ORDER

Recommendation

Approve a motion authorizing the General Manager to negotiate and execute an agreement with Pump Repair Service Company, Inc.

Background

EBDA's Asset Management Plan (AMP) lays out a schedule for proactive rehabilitation or replacement of Authority assets. The AMP initially called for two pumps at the Hayward Effluent Pump Station (HEPS) to be replaced in FY 2019/2020 and two pumps to be replaced in five years. Staff suggested replacing all four pumps at once to minimize overhead costs.

In 2019, as part of the FY 2019/2020 Renewal and Replacement Fund (RRF) Project List, the Commission approved a project to replace the four HEPS effluent pumps. Staff subsequently determined that installation of the new pumps would require modification to the interface between the pumps and the pump station to meet current seismic standards. The Commission approved addition of these engineering and structural upgrades as part of the FY 2020/2021 RRF Project List.

EBDA staff worked collaboratively with City of Hayward staff and Currie Engineers, Inc. (Currie Engineers) to develop a bid package for the pump replacements and associated repairs. See Item No. OM7.

Discussion

Bids were opened for the project to replace the four HEPS pumps at 2:00 pm on November 15, 2022. EBDA received the following bids:

DW Nicholson	\$855,181
GSE Construction	\$756,800
Pump Repair Service Company, Inc.	\$725,900

The bids came in higher than expected, however there are sufficient funds in the RRF to cover the project cost. As shown in the table, Pump Repair Service Company, Inc. is the lowest bidder, and their bid was deemed responsive. Following the bid opening, as the result of some value engineering, staff has identified an opportunity to save approximately \$100,000. A portion of the remaining work will be based on time and materials, so there may be potential for some additional savings.

Staff is requesting that the Commission award the contract to Pump Repair Service Company, Inc. for a contract value not to exceed \$725,900, and authorize the General Manager to negotiate a negative change order to lower the contract amount through value engineering.

SECTION 00300

BID FORM

To the:

Date: 11-15-22

East Bay Dischargers Authority
2651 Grant Ave
San Lorenzo, CA 94580

Name of Bidder Pump Repair Service Co., Inc

Business Address P.O. Box 34327, San Francisco, CA 94114

The undersigned as bidder declares that it has obtained the latest copy of the complete set of the **Hayward Effluent Pump Station Pumps Replacement, Project No. 2022-02** and carefully examined the location of the proposed work, the Contract Documents, and the plans and specifications therein referred to, and the bidder proposes and agrees if this proposal is accepted, that it will contract with the East Bay Dischargers Authority all labor, materials, necessary machinery, tools, apparatus, and other means of construction and services, and do all the work specified in the Contract Documents in the manner and time hereinafter set forth required for the construction of the work involved in the improvements designated as:

**Hayward Effluent Pump Station
Pumps Replacement
Project No. 2022-02**

ADDENDUM RECEIPT: The receipt of the following Addenda to the Contract Documents is acknowledged:

Addendum No. 1 Addendum No. 2 Addendum No. _____
Addendum No. _____ Addendum No. _____ Addendum No. _____

Acknowledgement of authenticity of Contract Documents of the **Hayward Effluent Pump Station Pumps Replacement, Project No. 2022-02**:

☒ By checking the box to the left, the undersigned Bidder acknowledges and declares that:

Its bid is based on the Contract Documents of the **Hayward Effluent Pump Station Pumps Replacement Project No. 2022-02**, including any addenda, and; it is the Bidder's responsibility to verify the accuracy and completeness of the information contained in the prior to utilizing it in preparing this bid.

The bidder proposes and agrees to contract with the East Bay Dischargers Authority to perform all the above work, including subsidiary obligations as defined in said specifications for the prices indicated below:

Total amount bid for Hayward Effluent Pump Station Pumps Replacement, Project No. 2022-02 :

Seven hundred twenty five thousand nine hundred dollars (amount in words)

\$ 725,900.00 (amount in numbers)

Further in submitting its bid, the undersigned Bidder understands and agrees that the Total Base Bid amount is determined by the sum total of all bid item amounts and the Base Bid Adjustment. Bid Items include all work as defined in Section 01025, **MEASUREMENT AND PAYMENT**. No base bid items will be excluded from the awarded contract.

Only one contract will be awarded.

The undersigned has filled in all information required herein and understands that failure to do so is grounds for rejecting the bid by the Authority.

The Authority reserves the right to change, delete or add new work to the Contract as per the terms of the General Conditions of the Contract Documents.

The undersigned has checked carefully all the above figures and understands that the Authority will not be responsible for any errors or omissions on the part of the undersigned in making up this proposal.

The undersigned understands that the Authority reserves the sole right to reject any or all bids and to waive any informality in bids received. Award will be made which, in the judgment of the Authority, is in the best interest of the Authority.

It is agreed that this proposal may not be withdrawn within a period of sixty (60) days after the date set for the opening thereof, except as allowed in Public Contract Code 5103.

Enclosed herewith is a (certified check, cashier's check, bond) for not less than ten (10) percent of the total amount of this proposal and the undersigned agrees that, in case of its default in executing the Contract furnish the necessary bonds and insurance policies after award and due notice thereof, the said check or bond and the money payable thereon shall become and remain the property of the Authority, as liquidated damages without proof of loss within ten (10) days of notice of default by Authority. In the event bidder provides the Authority with a Proposal Guaranty Bond, it shall be on the form enclosed herewith in Section 00410, **BIDDER'S BOND** and be issued by a corporate surety. The corporate surety shall be authorized to conduct business in California. At its discretion, the Authority may request that a certified copy of the certificate of authority of the surety issued by the Insurance Commissioner of the State of California be submitted by the surety to the Authority. At its discretion, the Authority may also require the surety to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code. The Bond and the corporate surety will be reviewed and approved by the Authority's counsel.

In accordance with the Specifications, the undersigned further agrees to so plan the work and to prosecute it with such diligence that said work shall be commenced within ten days after the date of Contract execution and notice to proceed and shall be substantially completed within the time specified in Section 00800-1.1, Time Allowed for Completion.

The undersigned agrees, if awarded the Contract, that there shall be paid by the undersigned and by all subcontractors under him, to all laborers, workers and mechanics employed in the execution of such Contract or any subcontract thereunder, not less than the general prevailing rate of per diem wages, and rates for overtime and legal holidays in the locality in which the work is to be performed, as ascertained and determined, pursuant to the State statute thereto applicable, by the Board. The schedule of general prevailing wages is available at the Authority for review. The representations made herein, including the bidder's licensing information hereinafter furnished, are made under penalty of perjury. The undersigned understands that any bid not containing said licensing information, or containing any information which is subsequently proven false, may be considered non-responsive, and shall be rejected by the East Bay Dischargers Authority.

Signed Wayne Archer

Name Wayne Archer

Contractor Pump Repair Service Company, Inc.

Title President

Contr. License No. 263997

DIR Registration No. 1000001908

License Classification A,C61/D21

Expiration Date September 30, 2023

Dated 11-14-22

Address P. O. Box 34327, San Francisco, CA 94014

Telephone 415-467-2150

Contractor's License Number 263997

Department of Industrial
Relations Registration Number 1000001908

*** END OF SECTION ***

ITEM NO. OM7 MOTION AUTHORIZING THE GENERAL MANAGER TO EXECUTE AN AMENDMENT TO WORK ORDER 2 UNDER THE PROFESSIONAL SERVICES AGREEMENT WITH CURRIE ENGINEERS, INC. IN THE AMOUNT OF \$18,930 FOR A TOTAL WORK ORDER VALUE OF \$38,247 FOR PROJECT AND CONSTRUCTION MANAGEMENT SERVICES

Recommendation

Approve a motion authorizing the General Manager to execute an amendment to Work Order 2 under the agreement for project and construction management services with Currie Engineers, Inc. (Currie Engineers) to increase the work order value.

Background

Following an RFP process, the Commission authorized the General Manager to enter into an agreement with Currie Engineers on September 20, 2018 for project management and construction management services. The scope of services included professional engineering, project development, bidding assistance, and engineering services during construction, all on an as-needed basis. The agreement was issued for the 2018/2019 fiscal year and then was extended with Commission approval for two additional fiscal years, through June 30, 2021.

In July 2021, a new agreement with Currie Engineers was approved by the Commission. This contract authorized retention of Currie Engineers for three more years – FY 2021/2022, FY 2022/2023, and FY 2023/2024 – to continue ongoing and as-needed project and construction management for planned Renewal and Replacement Fund (RRF) Projects. The agreement also contains two optional one-year extensions that may be exercised by the Authority. The agreement is funded out of RRF project authorizations.

The agreement is structured on a work order basis with an initial total agreement cost ceiling of \$75,000. Currie Engineers may only perform work under assigned work orders. Work is billed against each work order on a time and materials basis up to a maximum work order value. Mr. Currie's billing rates for the three years of this contract are \$137.00/hour (FY2021/2022), \$141.00/hour (FY2022/2023), and \$145.00/hour (FY2023/2024). This is an increase of 3% over the previously contracted rate. Currie Engineers' services remain very cost-effective.

Staff issued two work orders upon contract execution. The first was an as-needed work order under which Currie Engineers may complete small assignments at the direction of the Operations & Maintenance Manager up to a total of \$25,000. Work order two authorized Currie Engineers to provide project and construction management services for the HEPS Pump Replacement Project. The cost ceiling for that work order is \$19,317.

Discussion

Currie Engineers' work to develop the bid package for the HEPS Pump Replacement Project was more extensive than initially projected. Staff is therefore requesting that the Commission approve an increase to the cost ceiling for the HEPS Pump Replacement

Project Work Order. Currie Engineers estimates that an additional \$18,930 will be required to manage the project through construction. This brings the proposed total for the Work Order to \$38,247. The total value of authorized Work Orders 1 and 2 will then be \$63,247, under the \$75,000 contract value.

ATTACHMENT B.1 - LEVEL OF EFFORT

HOURLY BREAKDOWN AND BUDGET RECOMMENDATIONS

The level of effort below is an approximation of the hours anticipated for each task using current rates, with an anticipated start date of January 17, 2023.

Service	Qty	Unit	Hr/Unit	Hours	Rate	Amount
<u>HEPS Pump Replacement</u>						
Preconstruction meetings	1	EA	3.0	3	\$ 141	\$ 423.00
Preconstruction photos	1	EA	1.5	1.5	\$ 141	\$ 211.50
Document management	20	WK	0.5	10	\$ 141	\$ 1,410.00
Submittal pre-review	5	EA	1.0	5	\$ 141	\$ 705.00
Routine correspondence	20	WK	0.8	15	\$ 141	\$ 2,115.00
Periodic construction meetings	8	EA	1.5	12	\$ 141	\$ 1,692.00
Project team meetings	4	EA	1.0	4	\$ 141	\$ 564.00
Baseline schedule review	1	EA	3.5	3.5	\$ 141	\$ 493.50
Monthly schedule update review	0	EA	1.0	0	\$ 141	\$ -
RFIs and Design Clarifications	5	EA	2.0	10	\$ 141	\$ 1,410.00
Review PCOs and issue Work Directives	5	EA	1.5	7.5	\$ 141	\$ 1,057.50
Write Contract Change Orders	5	EA	1.5	7.5	\$ 141	\$ 1,057.50
Schedule of values	1	EA	4.0	4	\$ 141	\$ 564.00
Progress payment requests	6	EA	1.3	7.5	\$ 141	\$ 1,057.50
System Outage Requests (SORs)	4	EA	3.0	12	\$ 141	\$ 1,692.00
Coordinate special inspections	3	EA	2.0	6	\$ 141	\$ 846.00
Coordinate startup and training	1	EA	8.0	8	\$ 141	\$ 1,128.00
Review of as-built documents	1	EA	8.0	8	\$ 141	\$ 1,128.00
Periodic observations	3	EA	3.0	9	\$ 141	\$ 1,269.00
Periodic observation reports	1	EA	0.8	0.75	\$ 141	\$ 105.75
				134.3		\$ 18,929.25