

A Joint Powers Public Agency

NOTICE: In compliance with AB 361 (2021), the Operations & Maintenance Committee meeting scheduled below will be accessible via Zoom video conferencing. Members of the public may participate in the meeting through the Zoom link or phone number below.

- Zoom link: <u>https://us02web.zoom.us/j/84250769407</u>
- Telephone dial-in: 1(669) 900-6833, meeting ID #842 5076 9407

### ITEM NO. 19

#### **OPERATIONS & MAINTENANCE COMMITTEE AGENDA**

Tuesday, November 16, 2021

#### 9:00 A.M.

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

#### Committee Members: Toy (Chair); Cutter

- 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.** Renewal and Replacement Fund Annual Recap FY 2020/2021 (The Committee will review the annual recap of the Authority's Renewal and Replacement Fund for FY 2020/2021 and ongoing work carried over from prior fiscal years.)
- OM7. Motion Authorizing the General Manager to Execute Amendment No. 4 to the Contract with Brown and Caldwell for Field Work Related to Acceptance of Cargill Mixed Sea Salt Brine for Discharge at the EBDA Outfall in the Amount of \$104,674, for a Total Not to Exceed Amount of \$399,263 (The Committee will consider the motion.)
- **OM8.** Resolution Adopting the Administrative Appeals Policy (The Committee will consider the resolution.)

#### OM9. 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, contact Juanita Villasenor 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 <u>http://www.ebda.org</u>.

The next O&M Committee meeting will be held Tuesday, December 14, 2021, at 9:00 a.m.

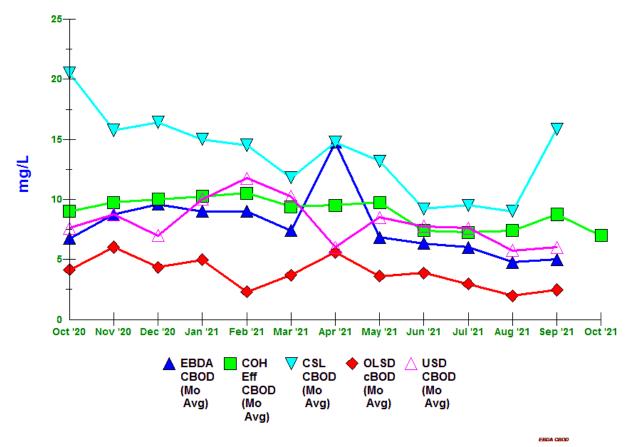
#### ITEM NO. OM4 EBDA PERMIT COMPLIANCE

#### Recommendation

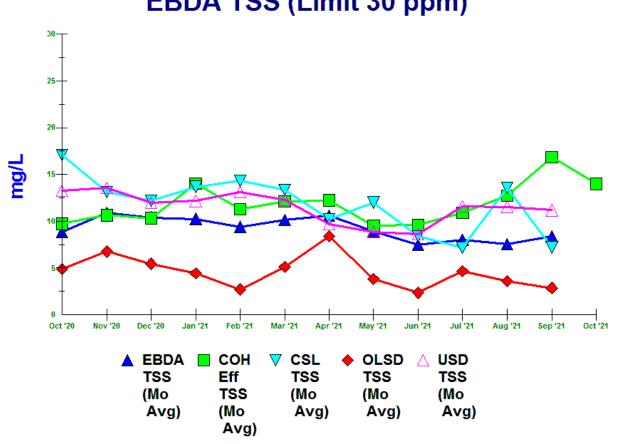
For the Committee's information only; no action is required.

#### Permit Compliance Issues

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



EBDA CBOD (Limit=25 ppm)



EBDA TSS (Limit 30 ppm)

EBDA EFF TSS

EBDA Bacterial Indicators										
	FECAL	ENTERO								
Date	MPN/ 100mL	MPN/ 100mL								
Limit (90th Percentile)	1100									
Limit (Geomean)	500	240								
November 2020 Geomean	11	4								
December 2020 Geomean	9	2								
January 2021 Geomean	5	3								
February 2021 Geomean	6	3								
March 2021 Geomean	5	3								
April 2021 Geomean	13	3								
May 2021 Geomean	10	6								
June 2021 Geomean	13	4								
July 2021 Geomean	11	2								
August 2021 Geomean	52	32								
9/6/2021	4	6								
9/7/2021	4	7								
9/8/2021	79	86								
9/13/2021	7	10								
9/14/2021	4	< 2								
9/15/2021	14	26								
9/20/2021	16	8								
9/21/2021	23	4								
9/22/2021	2400	22								
9/27/2021	40	6								
9/28/2021	240	16								
September 2021 Geomean	26	10								
10/4/2021	48	NA								
10/6/2021	240	NA								
10/8/2021	240	28								
10/9/2021	NA	8								
10/11/2021	346	2								
10/12/2021	8	3								
10/13/2021	49	3								
10/18/2021	10	< 2								
10/19/2021	7	2								
10/20/2021	23	4								
10/25/2021	10	8								
October 2021 Geomean	33	4								

## **EBDA Bacterial Indicators**

#### ITEM NO. OM5 STATUS REPORT

#### Union Effluent Pump Station (UEPS)

No change; all equipment is operational.

#### Hayward Effluent Pump Station (HEPS)

#### Effluent Pump Replacement Project

On November 9, 2021, Evan Currie with Currie Engineers, EBDA's contract Project and Construction Manager, sent the draft front end specifications to the City of Hayward's Engineer for review. Staff expects to issue the bid documents by the end of calendar year 2021, with installation occurring in late-2022.

#### PG&E Credit

In September 2021, EBDA received a \$3,000 credit from PG&E for electrical usage at HEPS. In June of 2020, as part of the HEPS Motor Control Center (MCC) Replacement Project, thermographic imaging and stress testing of the electrical equipment inside the MCC building was completed. A load bank was connected to the MCC to draw a large electrical load for a short period of time thus testing the main breaker and electrical components. This test resulted in a large PG&E demand charge of approximately \$3,000 more than our normal monthly demand charge. EBDA staff worked with our PG&E Customer Relationship Manager to facilitate this credit.

#### Oro Loma Effluent Pump Station (OLEPS)

#### Main Electrical Switchboard Upgrade

With the start of wet weather and the manufacturing delays due to the pandemic, the installation of the new breakers is postponed until the Spring of 2022.

#### Skywest Pump Station

#### **Recycled Water Production**

During the month of October 2021, the Skywest Recycled Water System only operated for one day and produced 0.49 million gallons of recycled water.

#### Marina Dechlorination Facility (MDF)

#### SBS Building Lighting Upgrades

During the month of October, a lighting upgrade project was completed at MDF replacing the 25-year-old light fixtures in the SBS Building. The San Leandro Maintenance Department installed six (6) new energy efficient LED light fixtures. The inside of the SBS building looks much brighter and is using less energy.

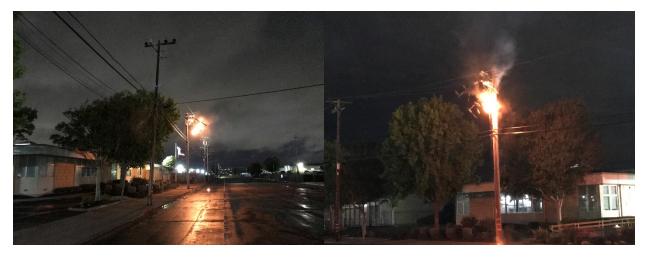
#### Force Main

No change; all equipment is operational.

#### **Operations Center**

#### **PG&E Power Pole Fire**

On October 17, 2021, at approximately 8:45 pm, a power pole in front of the EBDA Office caught on fire. The fire burned for almost 3 hours. Shortly after the start of the fire, the EBDA Office lost power. During the fire, the high voltage wires at the top of the power pole remained energized supplying power to OLEPS and the OLSD Treatment Plant. PG&E turned off all power to the area for an hour to remove the top of the power pole that was being supported by the high voltage wires. OLEPS was on generator power, and a diesel pump operated during the OLEPS power outage. The power outage to the EBDA office lasted over 30 hours, with the EBDA office on generator power for a portion of that time.



Power Pole Fire



High Voltage Wires Supporting Pole Top

**New Power Pole** 

#### Miscellaneous Items

#### **Underground Service Alerts**

EBDA received fourteen (14) Underground Service Alert (USA) tickets during the month of October 2021. Five required an Electronic Positive Response (EPR), and of the five, four required calls/emails to the excavators, and two required field verification.

#### Wet Weather

Total rainfall for the month of October 2021 (in inches) was as follows:

Oakland	Hayward	Livermore
5.32	5.02	5.22

Significant daily rainfall for the month of October 2021 (in inches) was as follows:

Date	Oakland	Hayward	Livermore
10/22/2021	0.42	0.57	0.54
10/23/2021	0.95	0.53	0.01
10/24/2021	3.57	3.42	4.06
10/25/2021	0.04	0.14	0.33

An atmospheric river storm event hit the EBDA service area on October 24, 2021. The MDF peak flow of 195.3 MGD was recorded at 8:11 pm on October 24<sup>th</sup>. The average daily flow at MDF was 111.4 MGD on October 24<sup>th</sup> and 120.5 MGD on October 25<sup>th</sup>. For reference, the average daily flow for the month of October 2021 was 63.9 MGD, and the average daily flow for September 2021 was 56.0 MGD. One OLEPS diesel pump was required to operate for 15.7 hours; and a second OLEPS diesel pump was required to operate for 4.1 hours concurrently. Fortunately, this was the first storm of the season and the ground was very dry. Had this storm occurred later in the wet season with more saturated soils, the flows would have been much higher.

Peak	Flow -	MGD
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MDF	195.3
OLEPS	131.1
UEPS	55.1
OLSD & CVSD	64.5
HEPS	18.7
SLEPS	16.5
LAVWMA	29.0

During the storm, USD and OLSD/CVSD sent all of their flows to EBDA. The extra flow was beneficial to flush the EBDA Bay Outfall. EBDA requested additional Hayward flow both before and after the peak of the storm. During the peak of the storm, Hayward voluntarily diverted flow to the Hayward Ponds.

Per the Amended and Restated Joint Powers Agreement (JPA), USD's maximum flow rate capacity is 42.9 MGD over a 3-hour average. USD exceeded its 3-hour average maximum flow rate capacity for a total of 3 hours and 7 minutes, with an average flow rate during that period of 50.9 MGD and a peak flow rate of 55.1 MGD. Had this not been USD's first capacity exceedance event of the fiscal year, a capacity exceedance fee of \$5,194 would have been assessed on 1,038,888 gallons.

Per the JPA, OLSD/CVSD's maximum flow rate capacity is 30.0 MGD over a 3-hour average. OLSD/CVSD exceeded their 3-hour average maximum flow rate capacity of 30.0 MGD for a total of 23 hours and 36 minutes, with an average flow rate during that period of 47.7 MGD and a peak flow rate of 64.5 MGD. Had this not been OLSD/CVSD's first capacity exceedance event of the fiscal year, a capacity exceedance fee of \$87,025 would have been assessed on 17,405,000 gallons.

#### **COVID-19 Response**

All EBDA staff members are fully vaccinated. Staff will work with the Commission to determine, on a month-to-month basis whether Commission and Committee meetings will continue to be conducted via Zoom or whether to resume in-person meetings. To continue conducting remote meetings, the Commission must adopt a resolution compliant with AB 361 – see Item No. 12.

#### **Special Projects**

#### **Disinfection Master Plan**

Staff is continuing to work with Carollo Engineers on a Disinfection Master Plan with a goal to develop a strategy for sodium hypochlorite (hypo) dosing and monitoring to prevent bacteria outbreaks and ensure consistent permit compliance while optimizing chemical dosage – both for disinfection and for dechlorination. A draft report was reviewed by staff, and Carollo is working to address comments.

#### Cargill Brine Project Due Diligence

EBDA staff is continuing to work with Cargill to develop strategies to address the risks of adding brine to the EBDA transport system. In the Corrosion Protection Evaluation Project, Brown & Caldwell screened a multitude of potential mitigation options for protecting vulnerable sections of the force main from corrosion associated with brine addition and then evaluated four in-pipe options in more detail. Brown & Caldwell concluded that segmental sliplining of the vulnerable sections of the transport pipe is the most robust and lowest cost in-pipe approach. Staff is recommending that Brown & Caldwell be retained to further evaluate potential impacts of the brine on OLEPS and the

MDF Wye (the metal force main at MDF). A proposed contract amendment for this scope as well as additional technical support, is included in Item No. OM7.

Cargill has also continued to evaluate a "parallel pipe" option, in which Cargill's pipe would be extended to a connection point further downstream in EBDA's system where there is greater dilution and less open channel flow. This parallel pipe option appears feasible and likely lower-cost than sliplining. Work to assess the preferred route for this pipeline is ongoing, with options including a "street route" down Union City Blvd., Hesperian Blvd., and Grant Ave., or a "Bayside route" following the EBDA transport pipe easement.

EBDA and Cargill have determined that an Environmental Impact Report (EIR) would be most appropriate for the project CEQA analysis. Proposed amendments for Ascent Environmental to lead the EIR process, as well as Larry Walker Associates to perform water quality analyses, are included in Items No. RA7 and RA8. The proposed EIR would focus on the parallel pipe street route as the preferred project, with the in-pipe corrosion protection and the parallel pipe Bayside route as alternatives.

#### 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. In April 2021, Sonoma Water's Board of Directors approved the agreements for the East Bay radar deployment and for the lease with American Tower. Installation of the radar at Rocky Ridge has faced some delays and is now planned for December 2021. In October, EBDA and Member Agency staff participated in a training session put on by the team at the National Oceanographic and Atmospheric Administration (NOAA), focused on accessing precipitation data and projections through the AQPI system.

## ITEM NO. <u>OM6</u> RENEWAL AND REPLACEMENT FUND ANNUAL RECAP FY 2020/2021

In May 2020, the Commission authorized an annual contribution to the Renewal and Replacement Fund (RRF) for Fiscal Year 2020/2021 in the amount of \$750,000. In June 2020, the Commission authorized a list of RRF projects totaling \$900,000 for FY 2020/2021, including \$100,000 in contingency funds to be used for unplanned projects.

For FY 2020/2021, the RRF total expenditures were \$744,569, which included the projects authorized in FY 2020/2021, as well as several carry-over projects. The two largest project expenditures in FY 2020/2021 were \$420,000 for UEPS Capital Costs as negotiated in the JPA, and \$114,203 for the completion of the HEPS MCC Project, bringing the total expenditure on that project to \$3,075,553. Several other noteworthy projects that were completed in FY 2020/2021 include the OLEPS Paving Project, the OLEPS Wet Well Hypo System, the OLEPS Water System Upgrade and the purchase of the 60-Inch Encapsulating Force Main Repair Coupling.

Additional detail on project expenditures is provided in the attached table. Projects authorized for FY 2020/2021 were as follows:

#### UEPS (Formerly AEPS) – Payment #1 of 10 per JPA – \$420,000

The Amended and Restated Joint Powers Agreement (JPA) states that "in fiscal years from 2020/21 through 2029/30, the Authority will pay Union a total of Four Million, Two-Hundred Thousand dollars (\$4,200,000), divided in ten equal and annual installments, as a credit toward their annual budget contribution for Operation and Maintenance Costs, for all Capital Costs associated with the Union Effluent Pump Station during the Term of the Agreement."

#### OLEPS – Electrical Upgrades – \$260,000

Replacement of the breakers and refurbishment of the Main Switchboard, 2 new automatic transfer switches (ATS's). Replacement of the 75 kW generator is also included and will be evaluated in further detail before the project proceeds. These upgrades will improve reliability of the station in the event of a power outage. The manufacturing and installation of the breakers has been delayed due to supply chain issues and will be completed at the conclusion of this wet season.

#### OLEPS – Wet Well Hypochlorite System – \$40,000

Installation of a new hypochlorite (hypo) pump, flow meter, and programmable logic controller (PLC) to allow EBDA to automatically add hypo to the OLEPS wet well for bacteria control. This project was completed.

#### OLEPS – Emergency Outfall Upgrade – \$30,000

Investigate the option of increasing the height of the overflow weir and implement if deemed feasible. This project is underway, following Commission approval of the consultant work order in October 2021.

#### OLEPS – Water System Upgrade – \$25,000

As part of a recent project, EBDA connected a #4 water line from OLSD to OLEPS. This project completed the connection of the #4 water line inside OLEPS. The #4 water line will be used in the event the OLEPS water system fails to provide cooling water for the pump gear drives. This project was completed.

#### OLEPS – Paving Repair/Upgrade – \$10,000

Under this project, EBDA paid for paving the area between OLSD and OLEPS as part of OLSD's Nutrient Optimization Project. As part of OLSD's subsequent Pavement Reconstruction and Rehabilitation Project, additional paving was added to the project east of OLEPS to reduce tripping hazards and match the rest of the plant where the paving is most noticeable. This additional paving cost EBDA approximately \$10,000 over what was budgeted (for a total of \$20,000). The Committee agreed that the additional paving was prudent, given the opportunity to cost-effectively add onto OLSD's paving project.

#### MDF – Control Panel Automation – \$15,000

This project will connect the Sewage Pump Control Panel and the main vault Sump Pump Control Panels to the station PLC for better control and monitoring. The project has been deferred until EBDA implements PLC upgrades associated with the new chlorine residual limit and monitoring requirements.

#### Contingency/Small Projects Fund – \$100,000

The purpose of the Contingency/Small Projects Fund is to provide additional funding for as yet unidentified projects and/or equipment that may need to be replaced or refurbished during the fiscal year. Much of the smaller ancillary equipment and components that the Authority owns are operated with the intent to "run to failure." This is a common practice at wastewater facilities with these types of assets, which include fans, valves, actuators, and small pumps and motors. While preventive maintenance is completed on a regular basis, forecasting an exact date of failure is not possible. Therefore, equipment that can be readily procured and that has sufficient redundancy to meet system firm capacity is "run to failure." In some cases, staff will purchase critical items to have them readily available, thus reducing system equipment downtime. The Contingency/Small Project Fund is also used for unexpected projects that arise throughout the year. The contingency budget for FY 2020/2021 was \$100,000. The contingency expenditures for FY 2020/2021 were \$39,784. Each project undertaken is discussed in more detail below.

#### UEPS Effluent Pump No. 2 Repair

This project included replacing the Variable Frequency Drive (VFD) transformer and field service.

#### EBDA Network Security Upgrade

EBDA's network security upgrade continued from FY 2019/2020 and included the installation of additional network security hardware and programming.

#### EBDA 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. In FY 2019/2020, with the HEPS MCC going on line, the timing was optimal to install new ethernet radios to upgrade communication to HEPS. In FY 2020/2021, new licensed ethernet radios were installed to upgrade communication to UEPS. 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 years.

# RRF FY 2020/2021 Summary Updated as of: June 30, 2021

Project Name	2020/2021 Expenditures	Prior Years' Expenditures	Total Expenditures through 2020/2021	Percent Spent	Percent Complete	Budget Estimate	Projected Completion Date	Notes
Prior Years' Projects			2020/2021					
HEPS MCC Project	\$114,203	\$2,961,350	\$3,075,553	101%	100%	\$3,050,000	Completed	
FM Manhole Coating & New Valves				0%	0%	\$75,000	Postponed	
MDF Analyzer		\$616	\$616	1%	0%	\$75,000	Postponed	Pending chlorine permit modification
Facilities Electrical Evaluation	\$400	\$25,456	\$25,856	108%	100%	\$24,000	Completed	<b>.</b>
OLEPS DE-PLC-SCADA		\$31,471	\$31,471	31%	31%	\$100,000	Postponed	
OLEPS Paving Repair/Upgrade	\$32,959	\$13,511	\$46,470	133%	100%	\$35,000	Completed	Added paving to reduce tripping hazards
EBDA Office Upgrade	\$3,350	\$2,780	\$6,130	15%	15%	\$40,000	June 2022	
HEPS Effluent Pump Replacement			\$0	0%	0%	\$360,000	June 2022	
Force Main Repair Couplings & Seals	\$62,518	\$85,129	\$147,647	92%	100%	\$160,000	Completed	
Prior Years' Project Subtotal	\$213,430	\$3,120,313	\$3,333,743			\$3,919,000	•	
2020/2021 Scheduled Projects								
UEPS Payment #1 of 10 Per JPA	\$420,000		\$420,000	100%	100%	\$420,000	Completed	
OLEPS Electrical Upgrades	\$14,067		\$14,067	5%	5%	\$260,000	June 2022	
OLEPS Wet Well Hypo System	\$40,981		\$40,981	102%	100%	\$40,000	Completed	
OLEPS Emergency Outfall			\$0	0%	0%	\$30,000	June 2022	
OLEPS Water System Upgrade	\$16,307		\$16,307	65%	100%	\$25,000	Completed	Eliminated additional piping
OLEPS Paving Repair/Upgrade			\$0			\$10,000	Completed	These additional funds were added above
MDF Control Panel Automation			\$0	0%	0%	\$15,000	June 2022	
2020/2021 Scheduled Project Subtotal	\$491,355	\$0	\$491,355			\$800,000		
2020/2021 Contingency Projects								
UEPS Pump #2 Repair	\$15,382	\$2,044	\$17,426				Completed	
EBDA Network Security Upgrade	\$5,604	\$5,607	\$11,211				Completed	
EBDA Communication System Upgrade	\$18,797	\$12,016	\$30,813				Completed	Continued work will be on a future project list
2020/2021 Contingency Subtotal	\$39,784		\$59,451			\$100,000		
2020/2021 Projects Total	\$531,139		\$550,806			\$900,000		
Total	\$744,569		\$3,884,549			\$4,819,000		

#### ITEM NO. <u>OM7</u> MOTION AUTHORIZING THE GENERAL MANAGER TO EXECUTE AMENDMENT NO. 4 TO THE CONTRACT WITH BROWN AND CALDWELL FOR FIELD WORK RELATED TO ACCEPTANCE OF CARGILL MIXED SEA SALT BRINE FOR DISCHARGE AT THE EBDA OUTFALL IN THE AMOUNT OF \$104,674, FOR A TOTAL NOT TO EXCEED AMOUNT OF \$399,263

#### Recommendation

Approve a motion authorizing the General Manager (GM) to execute Amendment No. 4 to the contract with Brown and Caldwell in the amount of \$104,674.

#### Background

Brown and Caldwell (BC) is an engineering consulting firm focusing on water and wastewater infrastructure. In 2016-2018, BC conducted a condition assessment of the Authority's transport system and outfall. BC has experience supporting wastewater agencies on a range of transport system issues, including a recent project assessing infrastructure risks associated with desalination brine inputs to the Monterey One Water system.

In August 2020, the Commission authorized the GM to enter into a contract with BC for due diligence work to assess infrastructure risks associated with addition of Cargill Mixed Sea Salt (MSS) brine into the transport system. In October 2020, the Commission authorized Amendment 1 to that contract for BC and their subconsultant to perform more detailed condition assessment of the pipe, including taking concrete samples. Staff subsequently authorized Amendment 2 to provide BC with a no-cost extension of their scope. The Commission authorized Amendment 3 in April 2021 for BC to conduct an analysis of corrosion protection alternatives for the segments of EBDA's transport system that have air entrainment. BC concluded through that effort that several corrosion mitigation options were feasible and that sliplining would be the most cost-effective.

#### Discussion

Staff is recommending a continuation of BC's contract, with proposed scope falling in two categories:

• <u>Corrosion Assessment for OLEPS and the MDF Wye</u>: The focus of corrosion assessments to date has been on the potential for the brine to accelerate corrosion in the transport system. This analysis would evaluate the potential for accelerated corrosion at the OLEPS facility and equipment, and the metal wye structure at MDF. These facilities would come into contact with dilute brine if Cargill connects downstream of USD, as originally planned. If a parallel pipe approach is employed, this study will inform whether the brine can be discharged into the OLEPS wet well, or if the connection needs to be downstream of OLEPS to protect the facilities. In either case, the blended brine will flow through MDF, so this study will evaluate potential impacts and mitigation measures.

• <u>As-needed Technical Services</u>: This scope would allow BC to provide technical support to EBDA on the Cargill project, including activities such as reviewing submittals from Cargill's design engineers, and providing technical input to the CEQA process.

The proposed fee for these additional tasks is \$104,674. The table below summarizes total fees for the project.

Phase	Total Fees
Effluent Outfall Evaluation for Receiving Brine Water Project	\$102,684
Amendment 1 - Transport Pipeline Condition Assessment	\$68,427
Amendment 2 - No-cost Extension	\$0
Amendment 3 – Corrosion Mitigation Alternatives Analysis	\$123,478
Amendment 4 – OLEPS and Marina Wye Corrosion Evaluation	\$104,674
Total	\$399,263

Cargill has agreed to reimburse the Authority fully for this amendment, including a 5% markup for administration.

#### Amendment 4: Scope of Work

#### East Bay Dischargers Authority

#### Effluent Outfall Evaluation for Receiving Brine Water

#### November 8, 2021

#### Purpose

Brown and Caldwell (BC) has assisted the East Bay Dischargers Authority (Authority or EBDA) with a due diligence effort to evaluate potential impacts to the Authority's facilities from accepting Mixed Sea Salts (MSS) brine from the Cargill, Incorporated (Cargill) solar salt facility. Preliminary evaluations have included an assessment of the following:

- Precipitation and sedimentation potential for brine mixed with treated secondary effluent.
- Impacts to EBDA's chlorination and dechlorination facilities
- Potential for accelerated corrosion of the transport pipeline and potential corrosion mitigation alternatives.

BC and EBDA have identified the potential for impacts to two additional facilities, the Marina Wye and the Oro Loma Effluent Pumping Station (OLEPS). The Effluent Outfall Evaluation for Receiving Brine Water scope will be amended to include an assessment of potential impacts to these two facilities. The evaluation will consist of the following tasks:

- Water Quality Estimates: develop water quality estimates for three scenarios for OLEPS and Marina Wye.
- Facility Assessment: Review of as-built drawings, and available documentation (including shop drawings and O&M manuals) for the Marina Wye and OLEPS to determine materials and appurtenances that will come into contact with the MSS brine.
- Corrosion Evaluation and Reporting: Evaluation of materials to assess impacts from brine exposure and summarizing results in a report.

#### Authority and Cargill Tasks

The Authority will provide the following information to BC as part of execution of this project:

- Available information including record documents such as-built plans, major equipment specifications, shop drawings, operation and maintenance (O&M) manuals, and service records for the OLEPS
- Available information including record documents such as-built plans and service records for Marina Wye.
- Available information for annual repair and replacement of wearable equipment parts at OLEPS, including cost, materials replaced, and quantity of materials replaced per year.
- Any additional water quality sampling performed on the brine (or blended brine) by Cargill between January 2021 through November 2021 not yet provided to BC.
- Available information from the Authority's asset management database on pump station and wye facilities, including remaining useful life calculations.

#### Amendment 4 Scope of Services

BC will complete the following tasks as part of Amendment 4.

#### Phase 001. Project Management

Perform Project Management activities. The current project management task is expanded to include budget to perform project administration and conduct project meetings for work scoped under this amendment.

#### Task 001.001 – Project Administration

Perform Project Administration tasks for the duration of the extended contract.

#### Task 001.002 – Project Meetings with Authority Staff and Cargill

Prepare for and hold one (1) kick-off meeting and one (1) progress meeting after completion of the Draft Report for the facility evaluation. BC has assumed that meetings will be no more than two (2) hours duration each and that they will be conducted virtually using Microsoft Teams for the duration of the project. Key team members shall be included in each meeting (a total of three [3] BC staff).

At the kick-off meeting, identify and discuss the scope of work and responsibilities of the key team members (i.e., project manager, technical advisor(s), and staff engineer) and establish dates for future meeting and project milestones (data delivery to BC, OLEPS facility visit, and BC delivery of draft and final reports). The kickoff meeting will include a discussion and agreement upon water quality scenarios that will be considered as part of the OLEPS and Marina Wye facility assessments.

At the progress meeting following submittal of the draft report, present and review draft deliverables with the Authority and Cargill ahead of finalizing these documents.

Prepare and circulate meeting agendas via email 5 days prior to each meeting. Prepare meeting minutes and circulate via email within 5 days following each meeting.

#### Phase 002. Reporting

Remains unchanged.

#### Phase 003. Agreement Assistance

Remains unchanged.

#### Phase 004. Prepare Amendment

Remains unchanged.

#### Phase 005. Transport Pipeline Condition Assessment

Remains unchanged.

#### Phase 006. Corrosion Protection Options Initial Screening

Remains unchanged.

#### Phase 007. Corrosion Protection Alternatives Analysis

Remains unchanged.

#### Phase 008. Additional Technical Support

BC shall provide additional technical support services to assist EBDA with progressing the brine discharge project, on an as needed basis Additional technical support may include, but is not limited to:

- CEQA support: provide technical details to support the development of an Environmental Impact Report for the recommended in-pipe solution (sliplining) identified as part of the work completed under Amendment 3 to this contract.
- Review of deliverables: Reviews of reports, calculations, or other deliverables developed by others related to this project. This may include but is not limited to corrosion analyses prepared by WJE or deliverables developed by Jacobs on the parallel pipe alternative and potential brine booster pumping station located at the Oro Loma Wastewater Treatment Plant
- Coordination on hydraulic model development: work with Carollo to make revisions to the model to improve accuracy, develop hydraulic model scenarios, and review results.
- Responses to Questions: provide responses to questions from the Authority or Cargill via the Authority with technical data to support responses.

This task includes up to 175 hours to provide as-needed technical support. BC will provide estimates of time required to complete requests and will provide updates on the budget status to EBDA following completion of each request.

#### Phase 009. OLEPS and Marina Wye Corrosion Evaluation

Evaluate corrosion potential for the OLEPS and Marina Wye. Identify corrosion mitigation alternatives and summarize recommendations and findings.

#### Task 009.001 – Water Quality Calculations

Estimate water quality at OLEPS and Marina Wye for three effluent flow scenarios to assess corrosion potential at the two facilities:

- Minimum flow: minimum historical diurnal flow rate, where MSS brine has greatest relative contribution to mixed wastewater concentration.
- Average dry weather flow: average daily flow rate during dry weather period; approximately summer average concentrations.
- Average annual flow: estimate average annual concentrations and impact.

Member agency discharge data previously received and compiled for the Brine Evaluation Study Technical Memorandum (Brown and Caldwell, May 2021) shall be used to estimate member agency flow and constituents (USD, Hayward, Oro Loma/Castro Valley, LAVWMA, San Leandro). Data previously provided by Cargill will be used to assess MSS brine constituents. Estimates shall use OLI water chemistry modeling and will evaluate or calculate the following constituents and indices:

- Flow rate
- Chloride concentration
- Langelier Index
- Specific conductance
- pH

These indices will be utilized to estimate corrosion potential for facility assets that will come into contact with MSS brine. Additional parameters will be evaluated to calculate the Langelier Index.

#### Task 009.002 – Facility Assessment

Review existing OLEPS and Marina Wye record drawings and perform a site visit to identify assets that will potentially come in contact with MSS brine. Coordinate with the Authority and vendors to

verify information needed to evaluate equipment components and materials that may have potential contact with MSS brine wastewater (e.g., record drawings, shop drawings, operating manuals, etc.). BC shall coordinate a field visit for up to two (2) BC staff to document existing equipment and infrastructure condition and type. Authority shall escort BC staff through OLEPS facility during the site visit. An OLEPS operator will be available to provide input on materials of construction, station operation, etc. JDH will also accompany BC at the site visit.

If shop drawings are not available, serial numbers from pump station equipment will be obtained where visible (such as pumps, valves, etc.) and BC will follow up with manufacturers to obtain corresponding cut sheets. Up to 24 hours of staff engineer time is allocated for this follow up. Where materials of construction cannot be determined, BC will provide a recommendation for corrosion mitigation (as applicable) or materials of construction for a replacement appurtenance that would be compatible with brine.

#### Task 009.003 – Corrosion Evaluation and Draft Report

Evaluate corrosion potential for assets identified in Task 009.002. Determine and report on MSS brine wastewater impact to useful life of permanent and replaceable assets for OLEPS and Marina Wye. Identify improvement alternatives for OLEPS and Marine Wye to mitigate or prevent corrosion.

Develop a draft report summarizing results including water quality estimates, the scenario most applicable to assess potential for corrosion, OLEPS and Marina Wye assets vulnerable to MSS brine, and susceptible to corrosion. The draft report shall be submitted electronically as both a Microsoft Word file and in PDF format to the Authority and Cargill for review and comment. Authority to review Cargill comments and provide consolidated comments to BC to address. Task 009.004 – Final Report

Address draft report review comments received from the Authority and submit a final report.

#### Task 009.005 – Quality Assurance & Quality Control

Perform senior technical staff quality control (QC) review of estimates and recommendations prior to delivery of draft and final deliverables. Perform quality assurance consultation with senior technical staff as needed.

#### **Assumptions:**

- BC will rely on all data and existing record drawings provided by EBDA, Cargill and other third parties without independent verification. Inaccuracies in the data or record drawings may impact recommendations and conceptual cost estimates.
- This scope of work does not include further analysis of corrosion potential for the transport or outfall pipelines.
- This scope does not include development of engineering design calculations, drawings, and/or specifications for improvements to the OLEPS or Marina Wye to mitigate corrosion.
- No material sampling or analysis will be performed as part of this scope of work.
- No wastewater sampling or characterization will be performed as part of this scope of work.
- Observations as part of the Facility Assessment (Phase 009.002) will be above grade only. No subsurface or confined entry observations shall be performed by BC or JDH.
- This scope does not include coordination with property owners or permitting agencies.
- Discharge and MSS Brine flow and water quality data received and used in the Brine Evaluation Study (Brown and Caldwell, May 2021) will be used to complete the Water Quality Estimates (Phase 009.001) under this amendment. Flow and concentrations are assumed to be representative of future conditions.

- Water chemistry model results for Brine Evaluation Study (Brown and Caldwell, May 2021) will be used for the average dry weather flow scenario.
- Water chemistry modeling will be conducted using OLI Studio and OLI Flowsheet electrolyte thermodynamic software for minimum flow and average annual flow scenarios.
- Diurnal concentration variations are not measured in effluent wastewater data and will not be evaluated as part of this task.
- Completely mixed conditions are assumed in this evaluation for EBDA wastewater and MSS brine blending at both the OLEPS and Marina Wye locations.
- Electrical conductivity will be estimated using a correlation and available TDS concentrations.
- Water chemistry modeling results at REACH 3, presented in the Brine Evaluation Study (Brown and Caldwell, May 2021), shall represent water quality at the OLEPS.
- Water chemistry modeling results at REACH 5, presented in the Brine Evaluation Study (Brown and Caldwell, May 2021), shall represent water quality at the Marina Wye.

#### Compensation

BC will perform the work on a time-and-materials basis, for a limiting fee not to exceed \$104,674. Table 1 presents the estimated fee. BC labor will be billed using a 3.23 effective labor multiplier. Labor costs include phone, fax, and computer charges.

Table 1. Project Fee	
Phase	Total Fees
Effluent Outfall Evaluation for Receiving Brine Water Project	\$102,684
Amendment 1 - Transport Pipeline Condition Assessment	\$68,427
Amendment 2 – No-cost Extension	\$0
Amendment 3 – Corrosion Mitigation Alternatives Analysis	\$123,478
Amendment 4 – OLEPS and Marina Wye Corrosion Evaluation	\$104,674
Total	\$399,263

#### Schedule

The work defined herein shall begin not more than ten (10) business days after BC receives the signed contract from the Authority.

The estimated time for completion for the project is four months following authorization. Delays in obtaining background information, scheduling of meetings, and receipt of comments will impact overall project schedule. Table 2 presents a summary of project milestones with estimated dates. This schedule assumes the Authority will provide review comments within 10 days for all BC deliverables.

Table 2. Amendment 4 Schedule								
Milestone	Estimated Timeline							
NTP	November 15, 2021							
Information Request	November 23, 2021							
Project Kickoff Meeting	November 30, 2021							
Background Information Provided by Authority	December 7, 2021							
Water Quality Calculations	December 7, 2021 through January 15, 2022							
Facility Assessment	December 7, 2021 through January 15, 2022							
Corrosion Evaluation	January 15, 2022 through February 15, 2022							
Water Quality and Facility Assessment Progress Meeting	February 17, 2022							
Submit Draft Report	February 24, 2022							
Authority/Cargill Review	February 27, 2022 through March 11, 2022							
Final Report	March 18, 2022							

	East Bay Dischargers Authority Brine Addition to Outfall Eval																			
		Philipson, Rachel	Rouhani, Shouhreh G	Faisst, William K	Visitacion- Sumida, Bernadette J	Sawyer, Linda K	Tanner, Deanna L	Stanisic, Dusan	Armenta, Maxwell				Airfare			JDH				
Phase	Phase Description	PM	PA	QAQC	Project Oversight	Water Quality SME	Word Processin g	Pump Station SME	Staff Engineer	Total Labor Hours	Total Labor Effort	APC		Total ODCs	Hours	Cost	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
001	Project Management	28	12		4	0	0	6	16	50	11,756	528	0			0	0	0		12,284
001	Project Administration	12	12	0	4	0	0	0		28	4,783	224	0			0	0	0	224	5,007
002	Meetings with Authority	16	0	0	0	0	0	6	16	38	6,974	304	0	0		0	0	0	304	7,278
800	Additional Tech Support	175	0	0	0	0	0	0	0	175	33,599	1,401	0	0		0	0	0	1,401	35,000
****	Default Task	175	0	0	0	0	0	0	0	175	33,599	1401	0	0		0	0	0	1,401	35,000
009	<b>OLEPS and Wye Corrosion</b>	28	0	12	0	4	12	44	140	240	43,369	1,920	1,000	1,000		10,000	10,000	11,000	14,020	57,389
001	Water Quality Calcs	8	0	0	0	4	0	0	40	52	7,951	416	0	0		0	0	0	416	8,367
002	Facility Assessment	8	0	0	0	0	0	32	40	80	16,299	640	1,000	1,000		1,000	1,000	2,000	2,840	19,139
003	Corrosion Eval and Draft Rep	8	0	0	0	0	8	8	60	84	12,941	672	0	0		9,000	9,000	9,000	10,572	23,513
004	Final Report	4	0	0	0	0	4	4	0	12	2,459	96	0	0		0	0	0	96	2,555
005	QAQC	0	0	12	2 0	0	0	0	0	12	3,719	96	0	0		0	0	0	96	3,815
	GRAND TOTAL	231	12	12	4	4	12	50	156	465	88,724	3,849	1,000	1,000	0	10,000	10,000	11,000	15,949	104,674

#### ITEM NO. OM8 RESOLUTION ADOPTING THE ADMINISTRATIVE APPEALS POLICY

#### Recommendation

Adopt the resolution to approve the Authority's Administrative Appeals Policy.

#### Background

The Authority's Amended and Restated Joint Exercise of Powers Agreement (JPA), which went into effect on July 1, 2020, includes several instances in which the General Manager (GM) is authorized to make a determination, which can then be appealed to the Commission by any Member Agency disagreeing with that determination. Specifically, the GM may determine whether a Failure of the Transport System has occurred and which member agencies are responsible for an unpermitted discharge or other permit violation.

Working with the attorneys from Hanson Bridgett, who assisted in drafting the JPA, staff developed a draft Policy outlining how such appeals of GM decisions would be handled. Because the financial consequences to the Member Agencies may be significant, tensions are likely to be high when this process is invoked. The intent of adopting this Policy in advance is to ensure that the process has been agreed to by all parties, thereby allowing any disagreements to be focused on the substance of the issues.

#### Discussion

The draft Policy was reviewed by the Committee in October 2021. The Committee supported the Policy overall, but suggested that the steps in the process and associated timelines be clarified. Staff has proposed several edits to address this concern, which are shown in track changes. A clean copy of the Policy is also included for adoption.

POLICY NUMBER: 8

**NAME OF POLICY:** Administrative Appeals Policy

LAST REVISED: November 18, 2021

PREVIOUSLY REVISED: N/A

**PURPOSE:** Policy Establishing the Administrative Appeals Procedures Applicable to Certain Determinations of the General Manager

POLICY:

#### I. Application

Pursuant to the East Bay Dischargers Authority (Authority) Amended and Restated Joint Exercise of Powers Agreement (JPA) effective July 1, 2020, the General Manager is authorized to make certain determinations which affect the rights and responsibilities of the Authority member agencies.

In particular, the General Manager is authorized to determine whether a Failure of the Transport System has occurred and which member agencies are responsible for an unpermitted discharge or other permit violation.

In the event the General Manager makes such a determination, the affected member agencies will have the right to appeal the determination to the Authority's Commission, pursuant to the procedures set forth in this Policy. In no event will a member agency's decision to pursue an appeal impact its obligation to immediately comply with any remediation measures imposed by a regulatory agency. The affected member agency must implement the remediation measures before pursuing, or concurrent with, any appeal.

#### II. <u>Stage 1: Preliminary Request for Reconsideration</u>

Prior to submitting an appeal to the Commission, the member agency must present a written request for reconsideration to the General Manager. The request must be submitted within 60 days of the date the agency receives notice of the General

Manager's <u>initial</u> determination and must include data and documentation supporting the member agency's position. Any member agency disputing the General Manager's determination that a Failure has occurred in the Transport System must provide an engineering report to support its position.

The General Manager will review all data and documentation and provide the member agency with a written final determination <u>Final Determination</u>.

#### III. <u>Time for Filing an Appeal with the</u><u>Stage 2:</u> Commission<u>Appeal</u>

Within 30 calendar days of the date of the General Manager's final determinationFinal Determination at the conclusion of Stage 1, the affected member agency may submit a written appeal to the Commission. The Commission, by unanimous approval, may extend this time period upon a showing of good cause. The written appeal request should include a brief summary of the member agency's position, document compliance with the aboveStage 1 reconsideration procedures, and include the date of the Commission meeting at which the member agency requests the Commission hear the appeal. In no event will the Commission hear an appeal more than 90 calendar days from the date the member agency files its appeal.

#### IV. Statement of the Basis of Appeal and Supporting Documentation

<u>At least 14 calendar days before the meeting at which the</u> <u>The written</u> appeal will be heard, the member agency must submitinclude a brief statement of the basis for appeal, including supporting data and documentation, for inclusion in the <u>Commission's Commission's</u> agenda packet. An agency may not raise any matters on appeal that were not presented to the General Manager for reconsideration in Stage 1.

The General Manager will prepare a summary of the basis for his/her determination, including supporting data and documentation, for inclusion in the Commission's agenda packet.

#### V. Stage 3: Consideration of the Appeal by the Commission

The Commission will hear the appeal at a public meeting and, upon consideration of the statements and facts presented, will make its determination. The determination of the Commission is final.

#### VI. Dispute Resolution

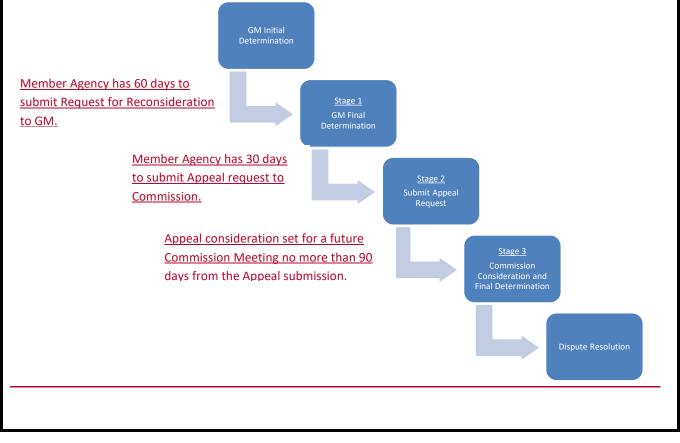
For any dispute which is within the scope of this Policy, exhaustion of these administrative appeals procedures (<u>Stages 1-3</u>) is a prerequisite to pursuing the dispute resolution procedures of Section 19 of the JPA. Upon completion of these administrative appeals procedures, a member agency will be deemed to have met its obligation to informally negotiate to resolve the dispute, as described in Section 19 of

the JPA, and the member agency may proceed directly to non-binding mediation, arbitration, or judicial determination.

#### VII. Waiver

The Commission may suspend or waive the requirements of this Policy in any instance. when the Commission deems it in the best interest of the Authority to do so.

#### Administrative Appeals Procedures Summary Chart



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In the event the General Manager makes such a determination, the affected member agencies will have the right to appeal the determination to the Authority's Commission, pursuant to the procedures set forth in this Policy. In no event will a member agency's decision to pursue an appeal impact its obligation to immediately comply with any remediation measures imposed by a regulatory agency. The affected member agency must implement the remediation measures before pursuing, or concurrent with, any appeal.

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Manager's initial determination and must include data and documentation supporting the member agency's position. Any member agency disputing the General Manager's determination that a Failure has occurred in the Transport System must provide an engineering report to support its position.

The General Manager will review all data and documentation and provide the member agency with a written Final Determination.

#### III. Stage 2: Commission Appeal

Within 30 calendar days of the date of the General Manager's Final Determination at the conclusion of Stage 1, the affected member agency may submit a written appeal to the Commission. The Commission, by unanimous approval, may extend this time period upon a showing of good cause. The written appeal should include a brief summary of the member agency's position, document compliance with the Stage 1 reconsideration procedures, and include the date of the Commission meeting at which the member agency requests the Commission hear the appeal. In no event will the Commission hear an appeal more than 90 calendar days from the date the member agency files its appeal.

The written appeal must include a brief statement of the basis for appeal for inclusion in the Commission's agenda packet. An agency may not raise any matters on appeal that were not presented to the General Manager for reconsideration in Stage 1.

The General Manager will prepare a summary of the basis for his/her determination, including supporting data and documentation, for inclusion in the Commission's agenda packet.

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The Commission will hear the appeal at a public meeting and, upon consideration of the statements and facts presented, will make its determination. The determination of the Commission is final.

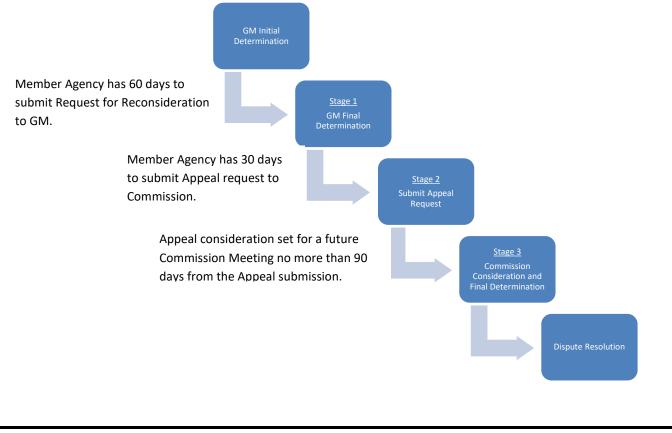
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#### VII. Waiver

The Commission may suspend or waive the requirements of this Policy in any instance. when the Commission deems it in the best interest of the Authority to do so.

#### Administrative Appeals Procedures Summary Chart



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

**RESOLUTION NO. 21-13** 

INTRODUCED BY \_\_\_\_\_

#### **RESOLUTION ADOPTING THE ADMINISTRATIVE APPEALS POLICY**

**WHEREAS**, the East Bay Dischargers Authority (EBDA) adopted an Amended and Restated Joint Exercise of Powers Agreement (JPA) dated July 1, 2020; and

**WHEREAS,** the JPA outlines several instances, including determination of a Failure as defined in the JPA, and responsibility for a violation, where the General Manager is responsible for making a determination, which can be appealed to the Commission; and

**WHEREAS,** the Commission wishes to adopt a Policy outlining the process for appeals in order to provide a common understanding and minimize disagreements in the event of a General Manager determination under the JPA; and

**WHEREAS,** the Operations & Maintenance Committee has reviewed the Administrative Appeals Policy and recommends its adoption.

**NOW, THEREFORE, BE IT RESOLVED,** the Commission of the East Bay Dischargers Authority hereby adopts the Administrative Appeals Policy.

SAN LORENZO, CALIFORNIA, NOVEMBER 18, 2021, ADOPTED BY THE FOLLOWING VOTE:

AYES: NOES: ABSENT: ABSTAIN:

ATTEST:

CHAIR EAST BAY DISCHARGERS AUTHORITY GENERAL MANAGER EAST BAY DISCHARGERS AUTHORITY EX OFFICIO SECRETARY