

A Joint Powers Public Agency

Pursuant to the Governor's Executive Order N-25-20 the Operations & Maintenance Meeting scheduled for May 19th at 9:00 a.m. will be telephonic. The dial-in number for the meeting is +1 669 900 6833 with meeting I.D. #996 7616 1047. Members of the public are encouraged to dial in to the meeting using the same number.

ITEM NO. 17

OPERATIONS & MAINTENANCE COMMITTEE AGENDA

Tuesday, May 19, 2020

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. May 6, 2020 Bypass and May 12, 2020 Recycled Water Leak Incident Reports

(The Committee will discuss the incidents and responses.)

- **OM7.** Draft Renewal and Replacement Fund Project List for Fiscal Year 2020/2021 (The Committee will discuss the Draft RRF Project List for FY 2020/2021)
- OM8. Resolution Authorizing the General Manager to Issue a Credit to the City of San Leandro for Capital Reimbursements in the Amount of \$114,277 (The Committee will consider a resolution to issue a credit.)
- OM9. Resolution Authorizing the General Manager to Issue a Purchase Order to R&B Company for a 60-Inch Romac Encapsulating Force Main Repair Coupling in the Amount of \$61,727

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

OM10.Resolution Authorizing the General Manager to Issue a Purchase Order to Miller Pipeline for Flexible Internal Force Main Seals in the Amount of \$32,645

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

OM11. 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, June 16, 2020, at 9:00 a.m.

ITEM NO. <u>OM4</u> EBDA PERFORMANCE

Recommendation

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

Permit Compliance Issues

There were no NPDES permit violations in March and preliminary data from April are also free of permit exceedances. Member Agency CBOD and TSS performance are shown below. A table with bacterial indicators is also included. Following anomalous fecal coliform detections in November and December, results this calendar year have been back to expected levels for the lower temperature season. EBDA staff continues to appreciate Member Agency lab staff, and especially San Leandro lab staff for diligently continuing all sampling and analyses during the Shelter-in-Place order to ensure protection of the Bay.





EBDA Bacterial Indicators FECAL **ENTERO** MPN/ MPN/ Date 100mL 100mL Limit (90th Percentile) 1100 Limit (Geomean) 500 240 May 2019, Geomean 14 2 June 2019, Geomean 16 3 July 2019, Geomean 9 3 < August 2019, Geomean 3 32 < Sept 2019, Geomean 3 12 2 Oct 2019, Geomean 35 2 Nov 2019, Geomean 32 Dec 2019, Geomean 18 < 2 7 2 January 2020 Geomean < February 2020 Geomean 5 < 3 2 3/2/2020 13 3/3/2020 23 2 2 3/4/2020 13 < 3/9/2020 10 2 8 2 3/10/2020 3/16/2020 3 < 2 2 7 3/17/2020 3/23/2020 12 < 2 3/24/2020 4 < 2 3 < 2 3/30/2020 3/31/2020 33 < 2 March 2020 Geomean 8 < 2 4/6/2020 3 < 2 4/7/2020 4 4 4/8/2020 2 33 < 4/13/2020 2 < 2 4/14/2020 2 2 < < 2 2 4/15/2020 < 4/20/2020 5 2 2 4/21/2020 4 4/22/2020 2 2 < 4/27/2020 3 2 < 7 4/28/2020 2 4 2

April 2020 Geomean

ITEM NO. OM5 STATUS REPORT

Alvarado Effluent Pump Station (AEPS)

Effluent Pump No. 2 Variable Frequency Drive (VFD)

On April 29, 2020, USD notified EBDA that the VFD for Effluent Pump No. 2 blew a 250 Amp fuse. Rockwell Automation Field Service inspected the VFD on May 5, 2020. The Field Service Engineer determined that the center pole lower portion of the transformer was burned and needed to be replaced. EBDA staff is in the process of obtaining quotes for repair or replacement of the center pole of the transformer.



Effluent Pump No. 2 VFD Transformer

Hayward Effluent Pump Station (HEPS)

Motor Control Center (MCC) Replacement Project

On May 1, 2020, GSE Construction, Inc. (GSE) completed the installation of the new stairs into the MCC building and the new platform around the generator.



MCC Building East End Stairs

MCC Building West End Stairs



Generator Platform

The last outstanding items on this project are thermographic imaging of the electrical equipment in the new MCC building and training on the new MCC equipment and pump station valves. The thermographic imaging and training are postponed until the COVID-19 Shelter-in-Place order is lifted and Member Agency staff resume normal operations.

Oro Loma Effluent Pump Station (OLEPS)

Bypass Incident

On May 6, 2020, OLEPS flow was discharged through the Oro Loma emergency outfall due to a power failure. Additional details are provided in Item No. OM6.

Emergency Generator Tachometer Upgrade

On May 19, 2020, Scot Campbell with Bay Power, LLC, is scheduled to complete the installation of the new electronic tachometer/speed switch. The work was originally scheduled for March 19, 2020, however this upgrade was postponed due to the COVID-19 Shelter-in-Place order. The generator is currently in service; this installation will improve reliability.

Electrical Improvements

On May 7, 2020, the new breaker and MCC bucket arrived and was installed in OLSD's new blower building. OLEPS now has a redundant source of emergency power from OLSD. The breaker was originally scheduled to arrive on Thursday and be installed on Friday, but due to the bypass incident, EBDA requested that the contractor work overtime to complete the installation on Thursday, May 7.

Dechlorination System Asphalt Pad

On April 22, 2020, the paving subcontractor for OLSD's Nutrient Optimization Project installed a Captor tank access pad at the OLEPS dechlorination system. Staff requested a quote to install a concrete pad, but it was deemed too expensive at \$8,688. The quote for the asphalt pad was \$2,147. The new asphalt pad will improve safety when working around the tank with a forklift. A safety orange water-filled barrier will be placed at the end of the pad closest to the tank to complete the project.



Captor Tank Access Pad

San Leandro Effluent Pump Station (SLEPS)

No change; all equipment is operational.

Skywest Pump Station

Recycled Water Production

During the month of April 2020, the Skywest Recycled Water System produced 2.64 million gallons of recycled water.

Recycled Water Pipeline Leak

On May 12, 2020, a failed coupling was discovered on the Skywest recycled water pipeline resulting in a leak to Bockman Canal. See Item No. OM6 for further details.

Marina Dechlorination Facility (MDF)

No change; all equipment is operational.

Force Main

Transport System Repair Couplings & Seals

Staff is recommending approval of resolutions to procure couplings and seals to be used in the event of a force main failure. See Items No. OM8, OM9 & OM10.

Operations Center

EBDA Office Dry Rot Repair & Window Replacement

Dry rot was discovered under the windows in the General Manager's and O&M Manager's offices. The FY 2018/2019 RRF project list approved by the Commission included \$40,000 for office upgrades, which included addressing this issue. Staff plans to replace the bottom portion of these two windows, as well as an additional two in the common area – with windows that will open, allowing fresh air to circulate in the office.

On April 30, 2020, the replacement office windows were ordered. Once the windows are installed, the dry rot will be mitigated. The cost of the new windows is approximately \$2,500 including installation, and the cost of the dry rot repair is approximately \$2,000.

Miscellaneous Items

Underground Service Alerts

EBDA received thirty-five (35) Underground Service Alert (USA) tickets during the month of April 2020. Three required field verification.

Wet Weather

During the month of April 2020, there were no significant rain events that required the operation of an OLEPS diesel pump or discharge to the Hayward Ponds.

COVID-19 Response

Authority staff is implementing its Pandemic Response Plan, which includes staff primarily working from home and alternating time in the office to ensure social distancing. Signage regarding closure of the office to the public and the Authority's social distancing measures has been posted on the office door. All meetings are being conducted by phone and web conference.

The Authority is not currently incurring any costs that are expected to be recoverable through FEMA. Staff therefore does not recommend that the Authority declare a State of Emergency at this time, but will continue to monitor the situation, including state and federal guidance on eligibility for cost recovery.

Staff is also continuing to track research efforts utilizing data on the prevalence of SARS-CoV-2 virus in wastewater to track and anticipate COVID-19 community trends. To date, Oro Loma has participated in a study by the University of Arizona, and agencies are evaluating participation in a study by the private company BioBot, among others. The Stanford/Berkeley study currently has sufficient participants, but staff will keep in touch with researchers and offer assistance as needed. More information on research related to COVID-19 and wastewater can be found here. https://casaweb.org/research/. This site is part of an overall resource page that the California Association of Sanitation Agencies has set up for agencies here: https://casaweb.org/covid-19/.

Special Projects

Advanced Quantitative Precipitation Information (AQPI) Project

The regional AQPI project, to improve prediction of rainfall events in the Bay Area, continues to move forward. The Cooperative Agreement for installation of the X-band radar in the East Bay has been approved by the East Bay agencies, but approval by Sonoma County Water District, the implementing agency, has been slowed due to the COVID-19 emergency. Approval is now slated for June, with installation of the X-band at Rocky Ridge now estimated for September. Because of the delay, Sonoma Water does not anticipate billing agencies for their portion of the costs until work is underway. Staff expects EBDA's contribution to be made in FY 2020/2021 rather than FY 2019/2020 as originally predicted. Therefore, staff is recommending carrying over the \$29,000 budget item as noted in Item No. FM11.

Planning is also underway on a regional partnership agreement to fund the O&M of the system beyond 2021, when the original Department of Water Resources grant concludes. A User Group to discuss format and delivery of data for maximum benefit to wastewater agencies is also being formed.

ITEM NO. <u>OM6</u> MAY 6, 2020 BYPASS AND MAY 12, 2020 RECYCLED WATER LEAK INCIDENT REPORTS

Recommendation

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

Discussion

On May 6, 2020, the Authority had an unauthorized bypass of treated wastewater to San Francisco Bay via the Oro Loma emergency overflow structure, which the Authority is permitted to use only in wet weather. The attached report submitted to the Regional Water Board on May 13, 2020 provides full details of the incident and corrective action measures being undertaken.

On May 12, 2020, a leak in the Skywest recycled water line was identified along Bockman Canal that resulted in recycled water entering the Canal. 3200 gallons of chlorinated recycled water leaked into the Canal. Oro Loma staff staunched the leak by positioning a Vactor truck and pumped the Canal water back to the plant to ensure no chlorinated water or dechlorinating agent reached the Bay.

EBDA staff would like to thank the rapid response and superior efforts of Member Agency staff in these two events. In particular, Oro Loma operations, maintenance, collections, and lab staff went above and beyond to protect the Bay.



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

A Joint Powers Public Agency

To:	James Parrish, Regional Water Quality Control Board
From:	Jacqueline Zipkin, P.E.
Date:	May 13, 2020
Re:	Unanticipated Bypass Notification – May 6, 2020 Shallow Water Discharge 5-day Report

Introduction

On the evening of May 6, 2020, East Bay Dischargers Authority (EBDA) had an unanticipated bypass of wastewater through its shallow water emergency outfall at Oro Loma Sanitary District. Approximately 35,000 gallons of chlorinated secondary effluent was discharged, followed by approximately 132,000 gallons of dechlorinated fully compliant secondary effluent (total release of 167,000 gallons).

EBDA provided notification of the incident to California Office of Emergency Services (Control Number 20-2481) and to Regional Water Board staff as required in our NPDES Permit (Order No. R2-2017-0016, NPDES No. CA0037869). The permit states:

A written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision V.E.2.a, above, the following:

i. Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;

ii. Efforts implemented to minimize public exposure to the unauthorized discharge;

iii. Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;

iv. Corrective measures taken to minimize the impact of the unauthorized discharge;

v. Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;

vi. Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and vii. Quantity and duration of the unauthorized discharge, and the amount recovered.

This report serves as our 5-day written report to fulfill the above requirements.

Background and Overview of Station Operation

EBDA's Oro Loma Effluent Pump Station (OLEPS) receives chlorinated secondary effluent from Union Sanitary District (USD)'s Alvarado Wastewater Treatment Plant, City of Hayward (COH)'s Water Pollution Control Plant, and Oro Loma Sanitary District (OLSD)'s Wastewater Treatment Plant. Flows are pumped north from OLEPS to the Marina Dechlorination Facility (MDF), where they are combined with secondary effluent from the Livermore-Amador Valley Water Management Authority (LAVWMA) and the City of San Leandro (CSL)'s Water Pollution Control Plant, dechlorinated with sodium bisulfite, and discharged to San Francisco Bay via EBDA's deep water outfall (see Attachment 1 for an isometric diagram of the EBDA system).

During dry weather low flows, OLEPS typically operates using one of two electric pumps. Two diesel pumps are available at the station to pump high wet weather flows and to function as back-up to the electric pumps. The diesel pumps do, however, need some electric power to run. In the event of a power outage, they start automatically and shut down after a period of time if backup power is not available. Backup power is needed to run their fans and lube pumps to keep them functioning properly.

EBDA maintains a station emergency generator at OLEPS to provide auxiliary power to the diesel engines in the event of a power failure. As detailed later in this report, that generator was identified by EBDA as a vulnerability due to its age, and an electrical upgrade for the facility was underway at the time of this incident to connect OLEPS to OLSD's backup power system. As an additional precautionary measure in case of a failure of primary power and the station generator, a portable generator supplied by OLSD was connected at OLEPS.

When the pumps at OLEPS fail to run, the wet well fills and ultimately overflows to the EBDA's Oro Loma shallow water outfall. EBDA's permit allows for discharge of compliant effluent through the shallow water outfall when wet weather flows exceed the capacity of the EBDA system to discharge through MDF. An emergency dechlorination system dechlorinates the effluent prior to discharge. Under wet weather conditions, the dechlor system (pump and valve) operates automatically. The system is connected to station power, and thus when station power fails, the dechlor valve must be manually opened to initiate dechlor chemical flow by gravity.

See Attachment 2 for a schematic of OLEPS and Attachment 3 for a map of relevant facilities.

Incident Description

At 11:04 pm on May 6, 2020, PG&E power to OLEPS failed. The station generator was out of service due to a repair underway (see later section for additional details). The portable generator, which had been successfully tested the previous day, failed to stay running. Upon determining that the

generator would not run reliably, the following corrective actions were initiated to minimize the likelihood and impact of a discharge:

- Requested that COH divert flows to Hayward Ponds
- Requested that USD reduce flows
- Attempted to divert OLSD flows to OLSD equalization (EQ)
- Manually opened the dechlor valve at the emergency outfall structure to initiate gravity chemical feed
- Secured OLSD influent pumps

At approximately 11:27pm, the OLEPS wet well began overflowing to the emergency outfall. PG&E power was restored at approximately 11:33pm and the electric pumps resumed pumping to MDF. With the power restored, the dechlor system started automatically and the manual valve was closed.

EBDA estimates that the discharged ceased at 11:37pm based on a visual observation made by the EBDA O&M Manager at 11:36pm that the overflow was ongoing, and a level reading at 11:38pm showing that the level had dropped below overflow level.

A complete timeline of the incident is included as Attachment 4.

Due to the power outage, OLEPS wet well levels and flow data for the time of the incident are not available. The start of the overflow was therefore estimated using Figure 1 below, which is the OLSD's effluent flow meter trend from OLSD's SCADA system. The spike on the left side of the diagram represents the power outage. The subsequent erroneous increase in flow is the result of the OLSD's contact tanks backing up. Once the "flow" reaches the top of the chart, the level in the contact tanks reaches the blanking distance of the instrument, causing the drop to zero and the subsequent flat line. Approximately three minutes after that, at 11:27, the bypass begins. Conversely, the bypass ends at 11:37, and three minutes later the level in the contact tanks drops below the blanking distance, the "flow" drops to zero and back up to the top of the chart, and gradually returns to indicating the correct flow. Because staff has confidence in the time at which the overflow ceased, we were able to work backwards to determine the time at which it started. The time period between the end of the overflow and the point at which the instrument comes back onto the chart is the same as the time period between when the instrument begins to go off the chart and when the overflow begins.



In past events that have occurred under similar flow conditions, OLEPS has been offline for 20 minutes without overflow. This experience provides additional support for the assumption that the overflow began during the 23rd minute the station was offline.

Figure 2 is a photo of the outfall shortly after the incident. No sampling was conducted due to inability to access the discharge safely in the middle of the night.

Figure 2 – Outfall shortly after the incident at approximately 00:09



Discharge Quality and Quantity

Because flow to the outfall is not metered, a minute by minute calculation was performed to estimate the quantity of discharge using the following approach:

OLEPS influent = USD flow + OLSD flow OLEPS effluent = MDF flow - (LAVWMA flow + San Leandro flow) Discharge quantity = OLEPS influent - OLEPS effluent

Attachment 5 graphically illustrates this approach.

The detailed calculation is included as Attachment 6 and incorporates data from MDF, USD, CSL, LAVWMA, and OLSD's SCADA systems. For OLSD effluent, the SCADA data could not be used because, as noted above, the OLSD effluent flow meter reads erroneously high when levels increase as they did in this incident. To address this, OLSD's effluent value from prior to the power failure was used and assumed to be constant throughout the event. This assumption is conservative, in that as the incident was occurring and flow was backing up in OLSD's plant, the actual effluent value would likely have decreased.

The calculation shows that an estimated 35,347 gallons were discharged during the two minutes of overflow prior to manual activation of the dechlorination system. Subsequently, another 131,597 gallons of fully treated and dechlorinated wastewater was discharged before pumping was restored. The discharge mixed with Bay water and was not recovered. The flow values for MDF beyond the timeline of the incident show the OLEPs flows returning to MDF, providing further support that the OLSD discharge had ceased.

At the time the discharge began, chlorine residual was 2.6 mg/L. Two minutes after the discharge began, staff was able to initiate the dechlorination system and began adding calcium thiosulfate (Captor®). Approximately 8 gallons of Captor were added, resulting in a quantity over four times the amount sufficient to dechlorinate the total volume discharged (see Attachment 7 for calculation). At 02:34, an additional 6 gallons of captor was added at the outfall as a drawdown test of the dechlor system.

The photos in Figure 3 were taken the morning after the incident. As can be seen, significant debris is present in the outfall structure, which would have added to the mixing of the chlorinated effluent with the subsequent dechlorinated effluent with its extra Captor and the Bay water. High tide the night of the incident occurred at 12:29 am, adding to the mixing and dilution.



Figure 3 - Outfall the day following the incident at approximately 13:04

At the time visual inspections were completed the night of the incident (Figure 2) and the next day (Figure 3), no impacts were observed. Samples were not taken the following day due to the expectation that the discharge had been fully mixed and drawn out to open water overnight.

The risk of public exposure was deemed low risk due to the following factors:

- The discharge was secondary treated wastewater
- There is no safe public access to the Bay at this location
- The incident occurred in the middle of the night, and no signs of it were present by the next morning

Preventive Measures

As described above and shown in Attachment 2, OLEPS has multiple layers of redundancy to prevent unauthorized discharges and any associated impacts. The status of each element is outlined in this section.

Diesel Pumps

As noted above, the diesel pumps provide the first line of backup in the event of a power failure. The diesel pumps start automatically when a power failure is detected, but they shut down after a period of time if auxiliary power fails to start, which is needed for the fan and lube pump to protect the engine. The pumps worked as intended on the night of the incident.

Station Generator

The OLEPS Station Generator is a Pavid Manufacturing 75kW standby diesel engine-driven standby generator (see Figure 4). Though it is approximately 40 years old, it has historically been very reliable. Due to its age, EBDA had initiated a station electrical upgrade, described in a subsequent section. OLSD staff continued to maintain and test the generator under contract to EBDA. Recent generator run logs indicating that the generator was run on a monthly basis are included as Attachment 8. The most recent successful test was May 4, 2020.



Figure 4 – OLEPS Station Generator

On May 5, 2020, staff identified a bad rectifier anode on the voltage regulator for the EBDA standby generator. An OLSD maintenance mechanic was running the generator late in the day when it stopped producing power. The maintenance mechanic, OLSD Maintenance Manager & the EBDA O&M Manager worked until approximately 16:45 to identify the issue. It was too late to try to source to part at that time, so it was ordered on the morning of May 6, 2020 for next day delivery. The rectifier order and packing slip are included as Attachment 9.

This incident occurred on the night of May 6, 2020 while EBDA was awaiting the part. On May 7, 2020, the new rectifier arrived and was installed in the voltage regulator, which tested normal. The mechanic that installed the rectifier then assisted with the installation of the backup bower breaker from OLSD

and assisted with the testing of that new system until late that day. On May 8, 2020 staff installed the repaired voltage regulator, ran the standby generator with no problems, and returned it to service.

Portable Generator

In recognition that the station generator was vulnerable due to its age, a 104kW Baldor portable generator was hooked up to OLEPS on February 9, 2020 as an interim measure for redundant power while the electrical upgrades were completed. Regular maintenance was performed on the portable generator in accordance with OLSD's procedures for all their generators.

Attachment 10 shows recent work orders for the portable generator. On March 10, 2020 the batteries were replaced and the generator was test run without incident. The monthly preventative maintenance (PM) to exercise the generator was completed on April 17, 2020, the engine ran with no problems. On April 24, 2020, the OLEPS outlet that the portable generator battery charger was plugged into was replaced.

With the failure of the station generator, staff test ran the portable generator at 18:10 on the night of May 5, 2020 (see Attachment 11 for notes from OLSD's operations e-logger). The portable generator operated without incident.

On the night of the incident, May 6, 2020, when PG&E power failed, the operator's first action was to start the portable generator. For unknown reasons, during the incident, the generator would start but failed to stay running. Staff has since been unable to recreate the conditions for the generator failure. The portable generator was tested several times since the incident, including right after power was restored, and it started each time without issues.

OLSD Backup Power

In June 2019, in recognition of the need to increase redundancy and reliability of power at OLEPS, EBDA's Commission approved an electrical improvements project as part of its FY 2019/2020 Renewal and Replacement Fund Project List. In September 2019, EBDA staff requested that Beecher Engineering, Inc., EBDA's contract electrical engineer, prepare a report outlining the OLEPS standby power requirements and whether OLSD could provide the required standby power for the station. On September 20, 2019, Beecher provided a Memorandum indicating that OLSD can provide the required standby power to OLEPS. Under this approach, OLSD's backup generator will provide power to OLEPS in the event of a PG&E power failure and a failure of the OLEPS emergency generator.

EBDA then moved forward to implement the project. The first step was installation of underground conduits between OLSD's new Blower Building and OLEPS, which was completed in December 2019. The next phase of the OLEPS emergency power project included installing new conduits inside OLEPS, and installing wires in the conduits to connect the redundant source of emergency power from OLSD. Those elements were completed on April 3, 2020. The last critical phase of the project was connecting a 150-amp circuit breaker at the new OLSD blower MCC to the EBDA manual transfer switch outside the EBDA building. EBDA provided the specifications for the breaker and MCC bucket to the contractor on January 28, 2020. The contractor provided EBDA with a submittal on April 9, 2020, which EBDA approved and returned that same day. The breaker and MCC bucket had been scheduled to arrive on May 7, 2002 and be installed May 8, 2020. Following this incident, EBDA asked the contractor to work overtime to complete the project on May 7, 2020.

OLSD power is now connected to OLEPS. The operational strategy is for the station to default to OLSD backup power in the event of a PG&E power failure. If OLSD backup power fails, the operator will switch the manual transfer switch and start up the OLEPS generator. The portable generator also continues to be staged at OLEPS but is not connected at this time.

In its FY 2020/2021 Renewal and Replacement Fund Project List, which will be reviewed by EBDA's Commission the week of May 18, 2020, staff has included an additional project to improve electrical reliability at OLEPS. This next phase of the project includes replacement of the breakers and refurbishment of the Main Switchboard, as well as two new automatic transfer switches (ATS's). Once these improvements are installed, the operational approach will be for the OLEPS generator to be the primary source of backup power in the event of PG&E failure. If the station generator fails to start, the power feed would transfer automatically to OLSD's backup power. Replacement of the station generator is also included as part of the improvements project and will be evaluated in further detail before the project proceeds.

Storage Volume

Initially when the OLEPS pumps are offline, the OLEPS wet well will begin to fill. Subsequently if the pumps remain offline, the flow will eventually back up into the OLSD contact tanks, which can hold roughly four times the volume (see aerial photo in Attachment 3). The system overflows to the emergency outfall only when this volume is exceeded.

Staff has added a project to the FY 2020/2021 Renewal and Replacement Fund Project List to evaluate raising the weir at the emergency outfall structure, thus increasing the storage volume and buying additional time before the overflow level is reached.

Dechlorination

Under normal conditions, flow is pumped to MDF for dechlorination using sodium hypochlorite (SBS). An emergency dechlorination station at the Oro Loma outfall is equipped with Captor for dechlorination of any discharge through the outfall. The dechlorination system is also connected to OLEPS station power. If there is no power to the system, a bypass valve must be manually opened to initiate gravity dechlorination. The operator's priority was to start the portable generator, which he worked on for a number of minutes. When he ultimately determined that the generator would not start, he attempted to divert OLSD's flow to their EQ. Immediately after that, he went to the outfall and manually opened the dechlor valve. At that time, the overflow had been occurring for two minutes.

Staff is considering additional improvements to ensure reliability of the dechlor system as a fail-safe in the event of a discharge. In particular, OLSD is currently in construction on a sophisticated dechlor system as part of the improvements for its newly permitted shallow water discharge. EBDA staff will work with OLSD staff to determine whether there is a way to connect OLSD's system to EBDA's emergency outfall.

During the incident, additional SBS was also added at MDF as a preventative measure due to the expectation of large flow variations.

Operations and Planning

As part of a plant-wide effort to develop state-of-the-art electronic Standard Operating Procedures (SOPs), EBDA has partnered with OLSD to revamp the OLEPS SOP. The \$32,000 OLEPS SOP project is currently underway with completion expected in the next few months. Station improvements and lessons learned from this incident will be incorporated in the new SOP.

On May 7-11, 2020, the EBDA O&M Manager trained all shifts of OLSD operators on the new OLEPS backup power system and procedures for power outages.

On March 16, 2020, EBDA staff circulated the draft OLEPS Emergency Bypass SOP included as Attachment 12. This SOP was followed during the May 6, 2020 incident, and based on lessons learned, staff has proposed the modifications shown in Attachment 13. This updated SOP will be reviewed with OLSD staff and incorporated in the overall OLEPS SOP update.

In addition, staff is evaluating strategies to automate flow diversions upstream of the station in the event of a power failure. In this event, flows from OLSD, Hayward, and Union were curtailed by operators at those stations upon notification by EBDA's O&M Manager that there was a problem at OLEPS. Staff is investigating approaches such as automatically shutting off OLSD's influent pumps and Hayward's effluent pumps upon receipt of an alarm that OLEPS is without power (with some delay built in for generator startup).

Summary and Next Steps

In summary, the discharge of treated wastewater to San Francisco Bay via the Oro Loma shallow water outfall on May 6, 2020 resulted from a power failure compounded by failure of a portable generator at OLEPS. As of May 8, 2020, the station is connected to OLSD for backup power, the station generator is functioning and connected, and a portable generator is staged as an additional backup.

While there was an initial release of chlorine in the treated wastewater, EBDA believes that it was likely neutralized by sufficient dechlorinating agent in the subsequent discharge, and the full discharge was well-mixed, entering the Bay at nearly high tide. Risk to human health was extremely low, and no impacts to fish or wildlife were observed.

EBDA plans to implement the following improvements to further reduce the risk of future occurrences:

- Replace the breakers and refurbish the Main Switchboard at OLEPS
- Install of two new automatic transfer switches at OLEPS
- Evaluate the replacement of the OLEPS emergency generator
- Evaluate connection of the OLSD dechlor system to the emergency outfall
- Automate diversions of upstream flows in the event of a failure at OLEPS
- Raise the weir to the emergency outfall



ATTACHMENT 1 - THE EBDA SYSTEM

2





ATTACHMENT 3 – MAP

- 23:04 Power failure at OLEPS
- 23:08 O&M Received alarms & called OLSD operator start portable generator
- 23:10 O&M called COH operator to secure flow from HEPS turn off pumps
- 23:13 From COH pumps were secured no HEPS flow to OLEPS
- 23:12 ~ O&M Increased sodium bisulfite dose at MDF
- 23:15 O&M called OLSD operator portable generator would not stay running OLSD operator asked to divert OLSD flow to EQ
- 23:16 O&M called COH operator to divert flow to the Hayward Ponds
- 23:18 O&M called USD operator to reduce flow
- 23:20 From USD started reducing flow
- 23:20 From COH HEPS flow diverted to the Hayward Ponds
- 23:27 O&M called OLSD operator manual dechlor on & influent pumps off
- 23:28 ~ From OLSD Manual dechlor on
- 23:33 From OLSD influent pumps were secured
- 23:33 O&M adjusting dechlor
- 23:33 ~ Power back on
- 23:34 O&M called OLSD operator power back on
- 00:00 O&M called USD operator to return flow slowly
- 00:02 From USD started returning flow gradually
- 00:03 From OLSD started one influent pump
- 00:09 Inspected outfall area
- 00:31 O&M called COH operator to return flow
- 02:35 Additional Captor added at outfall



ATTACHMENT 5: OLEPS and EBDA System Flow Schematic

ATTACHMENT 6 - Discharge Calculation

nine	USD FIOW	OL3D FIOW	OLEP'S IIIIuein	NDF FIOW	LAVWIVIA FIOW	C3L FIOW	OLEP'S Enfuent	Discharge Qualitity MOD	Discharge Quantity Gallons	TOLAT	
23:27	30.5	16.1	46.6	36.1	9.8	5.7	20.6	26.0	18,056		Total gallons of
23:28	30.6	16.1	46.7	36.8	10.0	5.0	21.8	24.9	17,292	35,347	secondary treated
23:29	30.8	16.1	46.9	37.9	10.4	4.8	22.7	24.2	16,806		chlorinated water
23:30	30.6	16.1	46.7	37.8	10.4	5.2	22.2	24.5	17,014		
23:31	30.3	16.1	46.4	38.3	10.8	6.0	21.5	24.9	17,292		
23:32	30.1	16.1	46.2	38.5	11.1	6.3	21.1	25.1	17,431		
23:33	29.6	16.1	45.7	38.7	11.0	6.7	21.0	24.7	17,153		
23:34	28.9	16.1	45.0	38.7	11.4	6.3	21.0	24.0	16,667		
23:35	28.0	16.1	44.1	40.4	11.3	5.9	23.2	20.9	14,514		Total gallons of fully
23:36	27.2	16.1	43.3	38.0	10.3	5.6	22.1	21.2	14,722	131,597	treated wastewater
23:37				41.3						-	
23:38				48.7							
23:39				67.0							
23:40				83.2							
23:41				94.4							
23:42				102.1							
										466.044	T () (

Time USD Flow OLSD Flow OLEPS Influent MDF Flow LAVWMA Flow CSL Flow OLEPS Effluent Discharge Quantity MGD Discharge Quantity Gallons Total

166,944 Total gallons

ATTACHMENT 7 - Captor Dosage

		J	Dosa	ge Ra	tes fo	or De	chlo	rinati	ion	
			G	allons of (Captor [°] pe	r million	gallons o	f water		
	1	2	3	4	5	6	7	8	9	10
pН										
6.5	5.4	10.9	16.3	21.7	27.1	32.5	37.9	43.4	48.8	54.2
6.8	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.1	52.5
7.0	5.1	10.3	15.4	20.6	25.7	30.8	36.0	41.1	46.2	51.4
7.2	5.0	10.0	15.1	20.1	25.1	30.1	35.2	40.2	45.2	50.2
7.4	4.9	9.8	14.7	19.6	24.5	29.4	34.3	39.2	44.2	49.1
7.6	4.8	9.6	14.4	19.2	24.0	28.7	33.5	38.3	43.1	47.9
7.8	4.7	9.3	14.0	18.7	23.4	28.0	32.7	37.4	42.1	46.7
8.0	4.6	9.1	13.7	18.2	22.8	27.3	31.9	36.5	41.0	45.6
8.5	4.3	8.4	12.8	17.1	21.3	25.6	29.9	34.1	38.4	42.7
9.0	4.0	8.0	11.9	15.9	19.9	23.9	27.8	31.8	35.8	39.8
9.5	3.7	7.4	11.1	14.8	18.4	22.1	25.8	29.5	33.2	36.9
10.0	3.4	6.8	10.2	13.6	17.0	20.4	23.8	27.2	30.6	34.0

These rates are approximate and may be affected by factors such as temperature, reaction time and dissolved compounds in water which may react with Captor.

EBDA typical pH	7.3
ppm Chlorine	2.6
	0.0
Dosage at 2ppm	9.9
Dosage at 3ppm	14.9
Dosage at 2.6ppm	10.8 gal Captor per MC
EBDA Discharge	0.2 MG
Captor Dose Required	1.8 gal Captor
Actual Captor Dose	8 gal Captor
Overdose	4.4 times

ATTACHMENT 8



ORO LOMA SANITARY DISTRICT DIESEL ENGINE HOURS LOG STANDBY GEN - EBDA



MONTH: December 2019

DATE	OPERATOR	PREVIOUS READING	CURRENT READING	MAINT.	EMERG.	DIFFERENCE
12/1/19	mul		639.5			
12/33/15	B6-	639.5	639.8	1		. 3
/					4	
		2			12	

F:\0&M 2012\ADMINISTRATION\FORMS\OPERATIONS FORMS\DIESEL ENGINE LOG HOURS\Standby Gen - EBDA Engine hours log.doc





)an 2020 MONTH:

DATE	OPERATOR	READING	CURRENT READING	MAINT.	EMERG.	DIFFERENCE
1/1/20	BC		639.8			
1/24	53		639.9	\times		
/	μ. · · ·				*	
		145				
			- ×			

F:\O&M 2012\ADMINISTRATION\FORMS\OPERATIONS FORMS\DIESEL ENGINE LOG HOURS\Standby Gen - EBDA Engine hours log.doc





MONTH: FEB. 2020

DATE	OPERATOR	PREVIOUS READING	CURRENT	MAINT.	EMERG.	DIFFERENCE
2/1	MC	639.9				
219	HC	641MC	641.3		X	1.4
211	НС	641.3	641.6	X		0.3
2/12	Нс	641.6	641.8	. X		0.2
ę						
					0	
		к 				





MONTH: _____ March 2020

DATE	OPERATOR	PREVIOUS READING	CURRENT	MAINT.	EMERG.	DIFFERENCE
3/1	NP	641.8	641-8			Ø
3/30	MC	641.8	641.9	~		-
					-	
						ал. Г
		(2)				
				÷		





X

MONTH: APR 2020

DATE	OPERATOR	PREVIOUS READING	CURRENT READING	MAINT.	EMERG.	DIFFERENCE
4/1	CEN	641.9	641.9	1		ð
4/20/22	SR-	Le41.9	242.1			0.2

F:\O&M 2012\ADMINISTRATION\FORMS\OPERATIONS FORMS\DIESEL ENGINE LOG HOURS\Standby Gen - EBDA Engine hours log.doc





MONTH: May 2020

DATE	OPERATOR	PREVIOUS READING	CURRENT READING	MAINT.	EMERG.	DIFFERENCE
5/1		642,1				
5/4	He-	642.1	CH2.3			•2-
5 5	HC JS	642.3	642.5	V		0.2
5-8-2120	J.S	642.8	642.8			0,3

ATTACHMENT 9

Gene Palop

From:	Jeff Schier
Sent:	Wednesday, May 6, 2020 10:20 AM
То:	Gene Palop
Subject:	FW: Your Elliott Electronic Supply order # W00038441 confirmation

From: Sales/Customer Support [mailto:sales@elliottelectronicsupply.com]
Sent: Wednesday, May 6, 2020 9:40 AM
To: Jeff Schier
Subject: Your Elliott Electronic Supply order # W00038441 confirmation



Hello, jeff schier

Thank you for your order. If you need to change your order or have any questions, please contact us immediately by phone at (520)884-7394 Monday - Friday, 9am - 5pm PST. You may also check the status of your order anytime by logging in to your account by clicking here.

Payment Method:
Credit Card / Debit Card - Visa MC Amex Discover Credit Card Type: Visa Credit Card Number: xxxx-1783 Processed Amount: \$103.04
Shipping Method:
UPS - Next Day Air
Model Price Subtotal

Qty	Item	Model	Price	Subtotal
4	RECTIFIER 400V 40A DO-5 ANODE CASE	NTE5991	\$7.10	\$28.40
			Subtotal	\$28.40

Shipping & Handli	ng	\$74.64
Grand To	tal	\$103.04
Thank you, Elliott Electronic Supply		

Elliott Electronic Supply 1301 S Tyndall Ave Tucson, Arizona 85713 US (520)884-7394 sales@ElliottElectronicSupply.com https://www.elliottelectronicsupply.com/

Packing Slip

: Next Day Air Shipping Method

Date

Order#

: 05/06/2020 : W00038441

Billing Details

jeff schier oro loma 2600 grant ave san lorenzo california, California 94580 United States 510 276 4700 jschier@oroloma.org

Shipping Details

jeff schier oro loma 2600 grant ave san lorenzo california, California 94580 United States 510 276 4700 jschier@oroloma.org

SKU	Details	Quantity
076824926731	RECTIFIER 400V 40A DO-5	4
7	ANODE CASE	
	=NTE5991	
Total		4

Shipping Method : Next Day Air Tracking ID Order Notes : PO#

E.B.D.A EBBLDGOOI Emergeney generator, parts for dide bridge

ATTACHMENT 10

Preventive Maintenance Work Order

Plant Number: 000	044	Date: 5/8/2020 14:27:01					
PM ID Number	671 486	Plan Priority: 3					
Project ID:		Safety2 N					
Slot Number:		Asset Type:					
PM Group:	MM0063	Assot Code:					
in oroup.		Asset Code.					
Asset Location:		VYOIK LOCATION.					
Asset Short Desc:	GENR MI	Origination Date: 3/0/2020 16:55					
Cho CC-Lab Acct:	9800-LABOR						
Originator:	Gene Palop	GENE PALOP					
Phone No:	-	Completion Date: 4/1/2020					
Work Group:	MM	VVOR Area: MI					
Supervisor ID:		Fault Code.					
Assigned To:	Brian Charvet	vvork type:					
Scheduled Io:		Status: CLO					
		Compliance Type:					
Frequency Code:	30-M Last PM Usa	ge: Last PM Date: 04/17/2020					
work Requested:	SU PINOIE GENERATOR AND ENGIN	L TEST RUN					
	BEFORE PERFORMING THIS TASK DO) THE FOLLOWING					
	UN-PLUG TRICKLE CHARGER WHERE	APPLICABLE AND CHECK BATTERY CONDITION					
	CHECK OIL AND COOLANT LEVEL, A	ADD AS NEEDED					
	PERFORM WALK AROUND INSPECTION	N FOR LEAKS, BROKEN; FITTINGS, WIRES, CLAMPS					
BELTS, ETC. ALSO CHECK TIRE PRESSURE							
	IF ENGINE CHECKS OUT OKAY FOLD	LOW STARTING SOP IF SUPPLIED					
	IF ENGINE CHECKS OUT OKAY FOLD	LOW STARTING SOP IF SUPPLIED					
	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI	LOW STARTING SOP IF SUPPLIED					
Supp Requireme	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS Meter Reading:					
Supp Requireme	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Ent: CORR	OW STARTING SOP IF SUPPLIED UN-PLUGED FOR 24 HOURS Meter Reading:					
Supp Requireme	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Ent: CORR	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS Meter Reading:					
Supp Requireme Completed all tas Filled Gens with Found GFCL outlet	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR ks. with Fuel that needed it.	ECTIVE ACTION					
Supp Requirements Completed all tas Filled Gens with Found GPCI outlet	IF ENGINE CHECKS OUT OKAY FOLD WHERE APPLICABLE LEAVE TRICKLI Ent: CORR with Fuel that needed it. at EBDA that isn't functioning pr	LOW STARTING SOP IF SUPPLIED 2 UN-PLUGED FOR 24 HOURS Meter Reading: ECTIVE ACTION operly-Had rich test it and I let Howard know.					
Supp Requirement Completed all tas Filled Gens with Found GFCI outlet	IF ENGINE CHECKS OUT OKAY FOLD WHERE APPLICABLE LEAVE TRICKLU ENT: CORR With Fuel that needed it. at EBDA that isn't functioning pr	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS Meter Reading: ECTIVE ACTION operly-Had rich test it and I let Howard know.					
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Supp Requirement Completed all tas Filled Gens with Found GFCI outlet	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ENT: CORR ks. with Fuel that needed it. at EBDA that isn't functioning pr	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS Meter Reading: ECTIVE ACTION operly-Had rich test it and I let Howard know.					
Supp Requirements Completed all tas Filled Gens with Found GFCI outlet	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Ent: CORR with Fuel that needed it. at EBDA that isn't functioning pr	Completed Date:					
Supp Requirements Completed all tas Filled Gens with Found GPCI outlet	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Ent: CORR With Fuel that needed it. at EBDA that isn't functioning pr	Completed Date:					
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Supp Requirements Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Production	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Ent: CORR With Fuel that needed it. at EBDA that isn't functioning pr	Completed Date:					
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Supp Requirements Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Production Signed: Status: Date	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI Soft: CORR With Fuel that needed it. at EBDA that isn't functioning pr on/STAT te:// Time: LABOR	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS Meter Reading:					
Supp Requirements Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Production Signed: Dat Employee Id	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR with Fuel that needed it. at EBDA that isn't functioning pr on	LOW STARTING SOP IF SUPPLIED E UN-PLUGED FOR 24 HOURS ECTIVE ACTION operly-Had rich test it and I let Howard know. Completed Date:/					
Supp Requireme Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Producte Signed: Dat Status: Dat Employee Id	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR ks. with Fuel that needed it. at EBDA that isn't functioning pr on/ on/ STAT te:/_/ Time: LABOR Activity Code Craft Hours Ty	LOW STARTING SOP IF SUPPLIED 2. UN-PLUGED FOR 24 HOURS Meter Reading: ECTIVE ACTION operly-Bad rich test it and I let Howard know. Completed Date:					
Supp Requirement Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Production Signed: Status: Dat Employee Id	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR with Fuel that needed it. at EBDA that isn't functioning pr on	LOW STARTING SOP IF SUPPLIED SUN-PLUGED FOR 24 HOURS Meter Reading: ECTIVE ACTION operly-Bad rich test it and I let Howard know. Completed Date:					
Supp Requirements Completed all tas Filled Gens with Found GFCI outlet Signed:	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR iks. with Fuel that needed it. at EBDA that isn't functioning pr on/ on/ STAT te:// Time: LABOR Activity Code Craft Hours Ty	INTERNAL Date:					
Supp Requirements Completed all tas Filled Gens with Found GFCI outlet Completed By: SIGN OFF: Production Signed: Status: Dat Employee Id	IF ENGINE CHECKS OUT OKAY FOLI WHERE APPLICABLE LEAVE TRICKLI ent: CORR with Fuel that needed it. at EBDA that isn't functioning pr on/	Completed Date:					

Preventive Maintenance Work Order

Work Order: P131811

Date: 5/8/2020 14:27:01

Work Requested:

(continued) INSPECT BRAKE FLUID ON TRAILERS WITH HYDRAULIC BRAKES

PM Group Asset List

Date: 5/8/2020 14:27:02

Page 1 of 1

PM Group: MM0063 PM Group Description: GENR MI Work Order: P131811

Asset Number	Asset Type	Asset Short Description	Asset Location	Asset Status	Work Area	Critical Factor	Charge Percent
MAGENR001	E	Generator, Honda EU2000i (Maintenance	MAINTENANCE	ISF	MA	3	8.33
MIGENR001	E	Generator, 5KW Generac	EQUIPMENT BARN	ISF	М	1	8.33
MIGENR002	E	Generator, 10KW Trailer Mount	EQUIPMENT BARN	ISF	МІ	1	8.33
MIGENR004	Ę	Generator, 150KW Kohler	EQUIPMENT BARN	ISF	М	1	8.33
MIGENR005	E	Generator, 80KW Kohler	EQUIPMENT BARN	ISF	MI	1	8.33
MIGENR006	Е	Generator, 5KW Honda	EQUIPMENT BARN	ISF	MI	1	8.33
MIGENR007	Е	Generator, 6KW Magnum Lighting	EQUIPMENT BARN	ISF	м	1	8.33
MIGENR008	E	Generator, 104KW Baldor TS130	EQUIPMENT BARN	ISF	м	1	8.33
MIGENR009	E	Generator, 17KW Pac-Coleman	EQUIPMENT BARN	ISF	MI	1	8.33
MIGENR012	Е	Generator, 4KW Winco	EQUIPMENT BARN	ISF	MI	3	8.33
MIWELD001	Е	Generator, Gas-Powered Welder	EQUIPMENT BARN	ISF	MI	1	8.33
MIGENR010	E	Generator, Subaru 13KW	HYPO PAD	ISF	MI	1	8.33

12 Asset(s) Listed

PLANNED ACTIVITIES

5/8/2020 14:27:02

Activity Code	Predecessor	Activity Short Description	Worl	k Ap	Work Requested	Activity Sched Date	Completion Date
MAIN		Routine Maintenance			Perform Routine Repair	3/13/2020	4/17/2020
LABOR							
Craft Code			Actual Hours	Completion Date	n		
E	ELECTRICIAN		0.50				
М	MECHANICAL		2.50				

Work Order: P131811

Maintenance Work Order

Plant Number: 000			Data, ElDIODOD, 40-02-00
Work Order No: C111	167		Date: 5/8/2020 16:23:30
			Plan Priority: 3
Project ID:			Satety? N
Slot Number:			Asset Type: Facility
Asset Number:	EBBLDG001		Asset Code:
A A A			Work Location:
Asset Location:			Origination Date: 4/17/2020 14:23
Asset Short Desc:	Building General Repairs, EBDA		Due Date: 4/17/2020 14:23
Chg CC-Lab Acct:	2490-LABOR		Schedule Date:
Originator:	Brian Charvet	BCHARVET	Completion Date: 4/24/2020
Phone No:	8001		Work Area: EB
Work Group:	EM		Fault Code:
Supervisor ID:	PICH COODMAN		Work Type:
Scheduled To:	RICH GOODMAN		Status: CLO
Planner:			Compliance Type:
			Combustice (1) bot
	Baldor is plugged into it.		
Supp Requireme	ent:		Meter Reading:
	CORR	ECTIVE ACTION	
replaced receptac	le, tested good		
Completed By:		Co	ompleted Date://
SIGN OFF: Production	on/:	Ma	aintenance://:

SIGN OFF: Produ					Maintenan	ce:	//_	<u> </u>	
Signed:				_	Signed:				
			S	TATUS CI	ANGES				
Status:	Date: / /	_ Time:		_	Status:	_ Date: _	1_1_	Time::	_
	LABOR					MA	TERIAL		
Employee Id	Activity Code	Craft	Hours	Туре	Stock No		Qty	Account	
									-
					-				_
			- <u> </u>	(<u> </u>					

PLANNED ACTIVITIES

Work Order: C111167

5/8/2020 16:23:30

Activity Code	Predecessor	Activity Short Description	Worl	work B Requested	Activity Sched Date	Completion Date
MAIN		Routine Maintenance		Perform Routine Repair		4/24/2020
LABOR						
Craft Code			Actual Hours	Completion Date		
Е	ELECTRICIAN		1.00			

ATTACHMENT 11 – OLSD Operations E-Logger Entries for 5/5/20

Copy Link To #028924 **Location Treatment Plant Crew Operations** Shift Day 10Hr Created By Joe Carlini - 5/5/2020 8:01 AM Modified By Joe Carlini – 5/5/2020 5:59 PM 25 Joe 26 Jose Plant round normal operations Secured hypo in OLEPS at 08:55 Dumped trucks as required Tested old RAS pumps to 2b4 ok Maintenance de-ragged #7 recir pump Reset GFI at ferric pump Second influent pump on at 10:45 Removed duck from CCC Jeff S working on control panel for EBDA stand-by generator the repair will not be completed today so the Baldor generator has been set up to run in its place, Howard will be in tonight to run the generator with Don informed Manuel Backflushed grease line **Location Treatment Plant Crew Operations** Shift Day 10Hr Copy Link To #028926 Location Treatment Plant -> EB-EBDA (OLEPS) **Crew Operations** Shift Night 12Hr Created By Don Pride – 5/5/2020 7:08 PM Modified By Don Pride - 5/5/2020 7:08 PM 1830 pump 1 in service @ oleps @ 71.8%, flow @ 47.8 MGD, level @ 4.5', psi @ 9.0 1810 standby gen @ oleps o/s, test ran Baldore gen with HC, baldor to be used in the event of a power outage @ oleps

Attachment 12 EBDA OLEPS Emergency Bypass SOP March 16, 2020 DRAFT

If OLEPS experiences a catastrophic failure such as a loss of power or the OLEPS wet well level is above the Lag Diesel Start Level and the wet well continues to increase, the following steps shall be implemented:

The OLSD Operator will:

- 1. Inform the EBDA O&M Manager
- 2. Divert OLSD flow to EQ
- 3. Insure that the OLEPS Dechlorination System is operating properly. If the catastrophic failure is a loss of power and backup power is not available, the OLSD Operator will need to open the bypass value on the OLEPS Dechlorination System and start dechlorinating the flow manually.
- 4. Grab a sample of the flow leaving the Emergency Overflow Spillway and perform a chlorine titration

The EBDA O&M Manager will:

- 1. Secure the HEPS flow and contact the COH Operator to divert HEPS flow
- 2. Contact USD to reduce their flow as much as possible

Attachment 13 EBDA OLEPS Emergency Bypass SOP May 8, 2020 DRAFT

If OLEPS experiences a catastrophic failure such as a loss of power or the OLEPS wet well level is above the Lag Diesel Start Level and the wet well continues to increase, the following steps shall be implemented:

The OLSD Operator will:

- 1. Inform the EBDA O&M Manager
- 2. Divert OLSD flow to EQSecure OLSD Influent Pumps
- <u>3.</u> Insure that the OLEPS Dechlorination System is operating properly. If the catastrophic failure is a loss of power and backup power is not available, the OLSD Operator will need to open the bypass value on the OLEPS Dechlorination System and start dechlorinating the flow manually.
- 3.4. Divert OLSD flow to EQ
- 4.<u>5.</u> Grab a sample of the flow leaving the Emergency Overflow Spillway and perform a chlorine titration

The EBDA O&M Manager will:

- 1. Secure the HEPS flow and contact the COH Operator to divert HEPS flow
- 2. Contact USD to reduce their flow as much as possible



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

A Joint Powers Public Agency

То:	James Parrish, Regional Water Quality Control Board
From:	Jackie Zipkin, P.E.
Date:	May 13, 2020
Re:	Unanticipated Bypass Notification – May 12, 2020 Recycled Water Leak 24-hour Report

Introduction

East Bay Dischargers Authority (EBDA) operates a recycled water system that delivers disinfected secondary treated wastewater from Oro Loma Sanitary District (OLSD) to the Skywest Golf Course operated by the Hayward Area Recreation and Park District (HARD). On the morning of May 12, 2020 at 9:45 am, OLSD staff notified EBDA of a leak in the Skywest recycled water pipeline, which runs along the bank of the Bockman Canal. SCADA trends indicate that the leak started at 6:50 am, and EBDA estimates that approximately 3200 gallons leaked into Bockman Canal. The cause of the leak was a failed coupling on the pipeline. All leaked flow was recovered and pumped back to OLSD's Wastewater Treatment Plant.

EBDA notified the California Office of Emergency Services (Control Number 20-2535), and verbally notified Regional Water Board Staff. This report constitutes EBDA's 24-hour notification per our NPDES Permit (Order No. R2-2017-0016, NPDES No. CA0037869).

Incident Timeline

- 06:50 Estimated time leak began
- 09:45 OLSD notified EBDA of a leak at the bridge at the Bockman Canal
- 09:48 Skywest system secured (i.e. pumping ceased)
- 10:10 OLSD Vactor truck in position and preventing leak from entering the canal
- 10:28 Sample taken from leaking pipe at Location #1 (see map below)
- 10:34 Sample taken from Location #2
- 10:55 Pumping from Location #1 back to the OLSD Plant
- 12:40 Sample taken from Location #2
- 14:15 Leak repaired, pumping canal back to the plant secured
- 14:45 Skywest system on to test repair, no leaks



Map of the Bockman Canal Area

Distance from Location #1 to Location #2 is approximately 800 feet.

Discharge Quality and Quantity

The Skywest system started pumping at 01:00, and the golf course started transferring water from the West Pond to the East Pond at 04:00. The West Pond level continued to increase until approximately 06:50 at which time the Pond level stopped increasing, indicating the start of the leak (see SCADA Trends figure below).



SCADA Trends

OLSD staff estimated a volumetric leak rate of 16 gallons per minute (gpm). The leak was present from approximately 6:50 am to 10:10 am, at which time OLSD began using

a Vactor truck to stop the leak from entering the canal. Therefore, the leak estimate is $16 \text{ gpm } \times 200 \text{ minutes} = 3200 \text{ gallons}.$

Dechlorinating agent calcium thiosulfate (Captor®) was added to canal in the area of the leak at the rate of 4 gpm to ensure that all chlorine was neutralized. In addition, staff began pumping from the canal at 600 gpm or 36,000 gallons per hour. A total of 120,000 gallons of canal water was pumped back to the plant, not including the Vactor truck pumping the leak itself. The pumping reversed the direction of the canal. All of the chlorinated flow and Captor was ultimately pumped back to OLSD's Treatment Plant.

Samples were taken at the location of the leak and downstream in the Canal (see previous map) shortly after the leak was discovered, and later after pumping had been in place for several hours. Results are presented below.

Sample Location	Sample Time	Cl Result (mg/L)
Location #1	10:28	20.9
Location #2	10:34	0.25
Blank of lab pure water	10:46	0.07
Location #2	12:40	0.06

As shown in the photos below, there is no public access to the Canal or Bay at this location, and no impacts to fish or wildlife were observed.

Cause and Preventative Measures

The cause of the leak was a failed coupling at the bridge. At this location, differential settling caused the pipeline to jut out, stressing the coupling. OLSD has hired a structural engineer to assess the conditions at the bridge and recommend improvements.

Incident Photos



OLSD Vactor Crew At The Location Of The Leak



Sample From Location #2



Pumping From Leak Area Back To The OLSD Plant



Captor Addition Near Location #1

Exposing The Leak



The Leak

The Repair



West From Bridge Near Location #1 At 10:25



West From Bridge Near Location #2 At 10:34



West From Bridge Near Location #2 At 10:34



East From Bridge Near Location #2 At 10:34



West From Bridge Near Location #1 At 11:14



West From Bridge Near Location #2 At 11:22



West From Bridge Near Location #2 At 12:40

ITEM NO. <u>OM7</u> DRAFT RENEWAL AND REPLACEMENT FUND PROJECT LIST FOR FISCAL YEAR 2020/2021

Recommendation

Review proposed Renewal and Replacement Fund Project List and provide direction to staff.

Background

Each year, the Commission is asked to approve a list of capital projects to be undertaken in the upcoming fiscal year using funds from the Authority's Renewal and Replacement Fund. The project list is developed using the Authority's Asset Management Plan (AMP) with input from the Managers Advisory Committee (MAC).

Discussion

The Authority's draft RRF Project List for FY 2020/2021 is presented on the following page for the Committee's review and comment, with project explanations on the subsequent page. Staff plans to bring the final FY 2020/2021 project list to the Commission for consideration in June 2020. Per Item No. FM12, staff is recommending that the agencies' contribution to the RRF for FY 2020/2021 is \$750,000, consistent with the AMP 20-year projection of funding needs.

RRF Projects for FY 2020/2021

<u>Facility</u>	Renewal Replacement <u>Fund Items</u>	Projected Completion Date	<u>E</u> :	<u>stimated</u> <u>Costs</u>	<u>Actual</u> <u>Costs</u>
UEPS	Payment #1 of 10 Per JPA	July 2020	\$	420,000	\$
OLEPS	Electrical Upgrades - Main Switchboard, 75 kW Generator, & 2 New Automatic Transfer Switches	June 2021	\$	260,000	\$
OLEPS	Wet Well Hypo System	December 2020	\$	40,000	\$
OLEPS	Emergency Outfall Upgrade	December 2020	\$	30,000	\$
OLEPS	Water System Upgrade	December 2020	\$	25,000	\$
OLEPS	Paving Repair/Upgrade	December 2020	\$	10,000	\$
MDF	Control Panel Automation	December 2020	\$	15,000	\$
		FY2020/2021 Sub-Total	\$	800,000	\$
		Small Projects Fund	\$	100,000	\$
		FY2020/2021 Total	\$	900,000	\$

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.

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

Installation 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.

OLEPS – Emergency Outfall Upgrade – \$30,000

Investigate the option of increasing the height of the overflow weir and implement if deemed feasible.

OLEPS – Water System Upgrade – \$25,000

As part of a recent project, EBDA connected a #4 water line from OLSD to OLEPS. This project will complete the connection of the #4 water line inside OLEPS. The #4 water line will be used in the event the OLEPS water system fails. The current contingency plan if the OLEPS water system fails is for OLSD staff to drag hoses from OLEPS to OLSD to provide cooling water for the pump gear drive. The new #4 water line will eliminate that need.

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

As part of the RRF Project List for Fiscal Year 2018/2019, \$25,000 was budgeted to repair/replace the asphalt behind OLEPS next to the 8,000 gallon diesel storage tank. As part of OLSD's Nutrient Optimization Project, the area between OLSD and OLEPS was paved in FY 2019/2020, and a portion of this project budget was used to pay for that time-sensitive paving project. The proposed additional \$10,000 is to replenish that project fund to complete the paving behind OLEPS.

MDF – Control Panel Automation – \$15,000

This project will connect the Sewage Pump Control Panel and the main vault Sump Pump Control Panels the station PLC for better control and monitoring.

Small Projects Fund (formerly Contingency Fund) – \$100,000

The purpose of the Small Projects Fund is to provide additional funding for unidentified projects and/or equipment that may need to be replaced or refurbished in FY 2020/2021. 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. The criteria for 'run to failure' are both that the equipment can be readily procured and that there is sufficient redundancy to meet system firm capacity. In some cases, staff will purchase critical items and have them on the shelf, reducing system equipment downtime.

ITEM NO. <u>OM8</u> RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A CREDIT TO THE CITY OF SAN LEANDRO FOR CAPITAL REIMBURSEMENTS IN THE AMOUNT OF \$114,277

Recommendation

Adopt a resolution authorizing the General Manager to issue a credit to the City of San Leandro (San Leandro) for reimbursement of capital items agreed upon during the recent Joint Powers Agreement (JPA) negations in the amount of \$114,277.

Background

Under the Amended and Restated JPA, San Leandro will be taking ownership and responsibility for the San Leandro Effluent Pump Station (SLEPS) and the force main from SLEPS to the Marina Dechlorination Facility. As part of the negotiation, the Authority agreed to reimburse San Leandro for planned capital expenditures on those facilities. Authority attorneys are currently in the process of drafting a Transfer Agreement to transfer ownership of the facilities, which will be brought to the Commission for consideration in June.

Discussion

Planned capital expenditures for which staff is recommending that the Authority credit San Leandro are as follows:

Force Main

The Draft Transport System Seismic Reliability Plan developed by Brown & Caldwell (B&C) recommended that EBDA procure encapsulating repair couplings to be used in the event of a force main failure. The JPA Term Sheet specified that the Authority would purchase couplings and seals for the 48-inch and 60-inch segments of the force main to mitigate risk being assumed by the Member Agencies under the new JPA. Purchase of the 60-inch coupling is addressed in Item No. OM9, and purchase of the seals is addressed in Item No. OM9.

San Leandro requested that in lieu of purchasing the coupling on their behalf, the Authority credit the City for the dollar value associated with the coupling. The Authority received a quote for a 48-inch Romac encapsulating force main repair coupling of \$51,938.

<u>SLEPS</u>

For SLEPS, staff is recommending reimbursing San Leandro for two planned projects:

• Electrical Improvements. In the Draft Facilities Electrical Evaluation Report, Beecher Engineering, Inc. recommended \$34,000 of electrical improvements at SLEPS. The goal of these improvements was to improve reliability during power failures. Rather than implementing the specific recommended projects, San

Leandro plans to put the \$34,000 toward connecting the station to their plant back-up power.

 Pump Rebuilds. The RRF project list for FY 2016/2017 included \$75,000 to rebuild the SLEPS Effluent pumps. \$46,661 was spent on the rebuild of two of the pumps. EBDA, in consultation with San Leandro staff, decided to delay the rebuild of last two pumps due to low run hours. As part of the station transfer to San Leandro ownership, staff is recommending crediting the City the remaining funds to complete the rebuilds in the future.

The credit breakdown is as follows:

48-Inch Romac Encapsulating Force Main Repair Coupling	\$51,938
SLEPS Effluent Pump Refurbishment	\$28,339
Total	\$114,277

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

RESOLUTION NO. 20-09

INTRODUCED BY

RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A CREDIT TO THE CITY OF SAN LEANDRO FOR CAPITAL REIMBURSEMENTS IN THE AMOUNT OF \$114,277

WHEREAS, the EBDA Member Agencies negotiated an Amended and Restated Joint Powers Agreement (JPA) that will take effect on July 1, 2020; and

WHEREAS, under the Amended and Restated JPA, the City of San Leandro will take over ownership and responsibility of the San Leandro Effluent Pump Station (SLEPS); and

WHEREAS, in negotiating the Amended and Restated JPA, the Authority agreed to reimburse the City of San Leandro for certain planned capital expenditures associated with the facilities being transferred; and

WHEREAS, in lieu of purchasing an encapsulating force main repair coupling, the Authority wishes to reimburse the City of San Leandro for the cost of such coupling in the amount of \$51,938; and

WHEREAS, in lieu of completing electrical improvements at SLEPS, the Authority wishes to reimburse the City of San Leandro for the cost of planned improvements in the amount of \$34,000; and

WHEREAS, in lieu of completing pump rebuilds at SLEPS, the Authority wishes to reimburse the City of San Leandro for the cost of planned rebuilds in the amount of \$28,339.

WHEREAS, the Operations & Maintenance Committee has recommended reimbursement of the City of San Leandro for these capital expenditures in the form of a credit.

NOW, THEREFORE BE IT RESOLVED, that the Commission of the East Bay Dischargers Authority hereby approves the reimbursement of the City of San Leandro in the amount of \$114,277.

BE IT FURTHER RESOLVED, that the Commission authorizes the General Manager to issue a credit to the City of San Leandro on behalf of the Authority in the amount of \$114,277.

ATTEST:

SAN LORENZO, CALIFORNIA, MAY 21, 2020, ADOPTED BY THE FOLLOWING VOTE:

AYES: NOES: ABSENT: ABSTAIN:

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

ITEM NO. <u>OM9</u> RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO R&B COMPANY FOR A 60-INCH ROMAC ENCAPSULATING FORCE MAIN REPAIR COUPLING IN THE AMOUNT OF \$61,727

Recommendation

Adopt a resolution authorizing the General Manager to issue a purchase order to R&B Company for a 60-inch Romac encapsulating force main repair coupling in the amount of \$61,727.

Background

Under the Amended and Restated Joint Powers Agreement (JPA), Union Sanitary District (USD) and City of Hayward (Hayward) will be taking responsibility for failures on the segments of force main they use. As part of the negotiation, the Authority agreed to purchase couplings and seals that can be used to repair the force main in the event of a failure to mitigate that increased risk. In the Draft Transport System Seismic Reliability Plan, Brown & Caldwell recommended procurement of 48-inch and 60-inch encapsulating repair couplings for the San Leandro and Union/Hayward segments of the force main, respectively.

EBDA received the following three quotes for one 48-inch & one 60-inch Encapsulating Repair Couplings:

R&B Company	\$113,663.70
Pace Supply Corp.	\$117,146.10
Victaulic	\$422,313.00

The R&B Company quote breakdown is as follows:

R&B Company Quote					
60-Inch Coupling	\$56,500.00				
Тах	\$5,226.25				
60-Inch Coupling Total		\$61,726.25			
48-Inch Coupling	\$47,540.00				
Тах	\$4,397.45				
48-Inch Coupling Total		\$51,937.45			
Total Quote		\$113,663.70			

As discussed in Item No. OM8, staff is proposing to reimburse San Leandro for the cost of the 48-inch coupling. Staff recommends purchasing one 60-inch coupling from R&B Company. R&B Company recently supplied USD with two encapsulating repair couplings for their 33-inch & 39-inch force mains. The 60-inch coupling purchased by EBDA will be stored at either USD or Hayward.

Date

\$

113,663.70

TOTAL

4/3/2020

R&B COMPANY SCOTT SILVERTHORN 3486 INVESTMENT BLVD, STE A HAYWARD,CA 94545 PH#510-571-1053

**** PRICE QUOTE****

CUSTOMER:	IER: EAST BAY DISCHARGERS AUTHORITY 2651 GRANT AVE SAN LORENZO, CA 94580		PROJECT:		EAST BAY DISCHARGERS AUTHORITY REVISION 1 REVISION 2*		
ATTN: PH#	HOWARD CII 510-362-250	N)1					
FAX#	510-278-654	7					
EMAIL	HCIN@EBDA	ORG					
QUANTITY	SIZE	DESCRIPTION		SELL	PER		EXTENSION
1	48"	ROMAC ENCAPSULATING PIPE JOINT FS425S-59.50 X 68.00 X 48.00 REPAIR SLEEVE C306RCP PIPE, BELL OD 68.00 PIPE OD 59.50 TO BE VERIFIED BE CUSTOMER SLEEVE LENGTH IS 48.00 40 PSI MAX WORKING PRESSURE STEEL BODY, C-213 EPOXY COATED, 316 STAINL STEEL BOLTS/NUTS AND EPDM RUBBER GASKET	\$.ESS rs	47,540.00	EA	\$	47,540.00
1	60"	ROMAC ENCAPSULATING PIPE JOINT FS425S-72.00 X 84.00 X 48.00 REPAIR SLEEVE C306RCP PIPE, BELL OD 84.00 PIPE OD 72.00 TO BE VERIFIED BY CUSTOMER SLEEVE LENGTH IS 48.00 40 PSI MAX WORKING PRESSURE STEEL BODY, C-213 EPOXY COATED, 316 STAINL STEEL BOLTS/NUTS AND EPDM RUBBER GASKET NOTE: NO TOOLS ARE INCLUDED IN THE PRICES	\$.ESS rs s ABO	56,500.00 VE.	EA	\$	56,500.00
		SPECIAL ORDER PRODUCT, CUSTOMER VERIFY AND CUSTOMER MUST DETERMINE THE PROD SUITABILITY AND APLLICATION.	OD's UCT				
		**PRICE INCLUDES SHIPPING	C1 10			ć	104 040 00
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			1 77			Ļ	5,025.70

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

RESOLUTION NO. 20-10

INTRODUCED BY _____

RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO R&B COMPANY FOR A 60-INCH ROMAC ENCAPSULATING FORCE MAIN REPAIR COUPLING IN THE AMOUNT OF \$61,727

WHEREAS, in May 2019, the Commission approved Resolution 19-13 approving the Joint Powers Agreement Term Sheet, which stated that East Bay Dischargers Authority (EBDA) will purchase spare parts as informed by the 2019 Seismic Reliability Plan to improve the Authority's ability to respond to seismic impacts to the transport system, including a 60-inch coupling; and

WHEREAS, the East Bay Dischargers Authority requested quotes for encapsulating force main repair couplings; and

WHEREAS, staff received three quotes for 60-inch encapsulating force main repair couplings; and

WHEREAS, staff has determined that the quote from R&B Company was the lowest qualified, responsive, and responsible quote; and

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

NOW, THEREFORE BE IT RESOLVED, the Commission of the East Bay Dischargers Authority hereby accepts the quote from R&B Company.

BE IT FURTHER RESOLVED, the General Manager is hereby authorized to issue a purchase order on behalf of the Authority in the amount of \$61,727 to R&B Company in accordance with the accepted quote.

SAN LORENZO, CALIFORNIA, MAY 21, 2020, ADOPTED BY THE FOLLOWING VOTE:

AYES: NOES: ABSENT: ABSTAIN:

ATTEST:

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

ITEM NO. <u>OM10</u> RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO MILLER PIPELINE FOR FLEXIBLE INTERNAL FORCE MAIN SEALS IN THE AMOUNT OF \$32,645

Recommendation

Adopt a resolution authorizing the General Manager to issue a purchase order to Miller Pipeline for flexible internal force main seals in the amount of \$32,645.

Background

Under the Amended and Restated Joint Powers Agreement (JPA), Member Agencies will be taking responsibility for failures on the segments of force main they use. As part of the negotiation, the Authority agreed to purchase couplings and seals that can be used to repair the force main in the event of a failure to mitigate that increased risk. In the Draft Transport System Seismic Reliability Plan, Brown & Caldwell recommended procurement of encapsulating repair couplings, as discussed in Items No. OM8 and OM9, as well as flexible seals. Brown & Caldwell specifically recommended WEKO-Seals.

To ensure that flexible seals could reasonably be installed in large diameter pipelines like EBDA's, staff discussed the purchase with Underwater Recourses, Inc. (URI). URI is the local company that provided divers for the EBDA outfall inspection several years ago. URI has experience installing the WEKO-Seal flexible internal force main seals provided by Miller Pipeline.

EBDA is purchasing three WEKO-Seals (14.5" wide) and one EPDM Sleeve (48" wide) for each of the different force main sizes: 48-inch, 60-inch and 96-inch. This stockpile of parts will allow EBDA to repair several different combinations of leaks or failures. The 48-inch seals will be given to the City of San Leandro, as they will be taking ownership of the 48-inch force main segment. The 60-inch seals will be stored at Union Sanitary District or City of Hayward, and the 96-inch seals will be stored by EBDA.



April 20, 2020

Howard Cin East Bay Dischargers Authority Quote No: 1008-2519 Phone: 510.278.5910 Fax: E-Mail: <u>hcin@ebda.org</u>

RE: **Proposal WEKO SEAL - Internal Joint Seals** 48", 60", 96" WEKO Seal/Sleeve Repairs (OTC)

Dear Mr. Cin:

General

Thank you for contacting Miller Pipeline for your pipeline rehabilitation needs. We are pleased to provide for your consideration the following information and material pricing for our WEKO-SEAL.

These seals are manufactured from non-toxic (EPDM) rubber compound, which is designed to internally and economically stop joint leakage or infiltration. WEKO-SEALS are flexible internal rubber leak clamps that ensure a noncorrodible, bottle tight seal around the full inside circumference of the pipe joint area.

Scope of Service

Our scope and unit price proposal includes the following work elements:

- 1. Provide WEKO-SEALS custom manufactured to the specifications for the pipe size and special conditions provided.
- 2. Installation of materials sold under this proposal will be installed by others.

Item No:	Description	Estimated Quantity	U/M	Unit Price	Amount
1	Furnish 48" Extra-Wide (14.6") EPDM WEKO-SEAL w/ (3) type 316-SS Retaining bands, shims, wedges, and lubricant.	3	EA	\$995.00	\$2,985.00
2	Furnish 60" Extra-Wide (14.6") EPDM WEKO-SEAL w/ (3) type 316-SS Retaining bands, shims, wedges, and lubricant.	3	EA	\$1,175.00	\$3,525.00
3	Furnish 96" Extra-Wide (14.6") EPDM WEKO-SEAL w/ (3) type 316-SS Retaining bands, shims, wedges, and lubricant.	3	EA	\$2,125.00	\$6,375.00

Proposal

4	Furnish 48" OD x 48" long EPDM Sleeve w/ (6) each 316-SS Retaining bands, shims, and wedges.	1	EA	\$3,000.00	\$3,000.00
5	Furnish 60" OD x 48" long EPDM Sleeve w/ (6) each 316-SS Retaining bands, shims, and wedges.	1	EA	\$3,930.00	\$3,930.00
6	Furnish 96" OD x 48" long EPDM Sleeve w/ (6) each 316-SS Retaining bands, shims, and wedges.	1	EA	\$7,320.00	\$7,320.00
7	Sales Tax for San Lorenzo, CA			9.25%	\$2,510.00
8	NTE Estimated Freight from Indianapolis, IN to Customer Location	1	LS	\$3,000.00	\$3,000.00

Sub Total \$32,645.00

Equipment Rental:

Equipment rented through this proposal will be issued on a default weekly basis, but can be extended to a monthly rate for orders requiring longer durations. To accommodate shipping delays, a period of two (2) weeks has been allotted for initial weekly rentals. Each additional week thereafter will be billed at the weekly rate identified below. If breakage occurs during use, please notify Miller Pipeline immediately for damage claim documentation. Damaged found to be the fault of the Lessee will be billed at cost. All rentals extending past a thirty (30) day rental period, excluding monthly rentals, will automatically be billed replacement value, without prior written approval – no exceptions. Lessee will be required to pay all shipping to and from Miller Pipeline - Indianapolis, IN 46234. In an attempt to better service our customer's rental needs, our intentions through this effort are prompt rental returns.

Hydraulic Expander/Tester Rental Rates				
Weekly Rental Rate	\$370/WEEK			
Monthly Rental Rate	\$840/MONTH			
Replacement Value	\$4,950.00			

Please return rented equipment to Miller Pipeline 8930 Crawfordsville Rd, Indianapolis, IN 46234

Cancelation/Return Policy:

- 1) Order placed with Miller Pipeline may not be canceled once authorization to manufacture has been given.
- 2) Only unopened parcels that are not custom in nature may be returned for a 25% restocking fee. No returns on open parcels and/or or orders with custom materials or sizing.
- 3) Orders requiring NEXT DAY delivery will require a \$125.00 Expedite Fee.

General Conditions

- 1. All shipping charges FOB Indianapolis, Indiana and/or vendor locations.
- 2. The proposal pricing does not include sales taxes. All applicable taxes will be added to the pricing unless Miller Pipeline is provided with a tax-exempt statement from the buyer.
- 3. This proposal will expire in thirty (30) days without a signed contractual agreement. Furthermore, this proposal will become part of any contractual agreement. After expiration of this proposal, our pricing is subject to adjustment or can be withdrawn.
- 4. WEKO SEAL Limited Warranty Miller Pipeline warrants for a period of 1 year from the date of purchase that any goods purchased from Miller Pipeline will be of good quality consistent with industry standards and materials and equipment agreed upon to be utilized. UNDER NO CIRCUMSTANCES SHALL MILLER PIPELINE HAVE ANY LIABILITY WHATSOEVER FOR INCEDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES, such as, but not limited to, loss of profit or revenue; cost of capital; or claims resulting from contracts between Customer and its customers and/or suppliers. Unless expressly provided for herein, in no event shall Miller Pipeline or any affiliate of Miller Pipeline assume responsibility or liability for (a) penalties, penalty clauses or liquidated damages clauses of any description, (b) certifications or (c) indemnification of Customer or others for costs, damages or expenses arising out of or related to the products provided hereunder.
- 5. The submitted pricing is subject to adjustment if the actual job site requirements and/or conditions differ from the information known at the time of this proposal.
- Payment shall be made within thirty (30) days after the date of invoice submitted by Miller Pipeline. For international transactions, payment must be made via wire transfer or irrevocable letter of credit (USD) prior to manufacturing of goods.

Closing

We thank you for the opportunity to offer this firm proposal and look forward to providing this service. If you have any need for further assistance, please do not hesitate to contact me.

Sincerely,

Daniel Watters Phone : 317.653.5298 Daniel.watters@millerpipeline.com

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

RESOLUTION NO. 20-11

INTRODUCED BY _____

RESOLUTION AUTHORIZING THE GENERAL MANAGER TO ISSUE A PURCHASE ORDER TO MILLER PIPELINE FOR FLEXIBLE INTERNAL FORCE MAIN SEALS IN THE AMOUNT OF \$32,645

WHEREAS, in May 2019, the Commission of the East Bay Dischargers Authority (EBDA) approved Resolution 19-13 approving the Joint Powers Agreement Term Sheet, which stated that EBDA will purchase spare parts as informed by the 2019 Seismic Reliability Plan to improve the Authority's ability to respond to seismic impacts to the transport system, including flexible internal force main seals; and

WHEREAS, staff determined that Miller Pipeline is the only supplier of WEKO-Seals, the specific flexible seals recommended by EBDA's consultants;

WHEREAS, EBDA requested a quote from Miller Pipeline for flexible internal force main seals; and

WHEREAS, staff has determined that the quote from Miller Pipeline was a qualified, responsive, and responsible quote; and

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

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

BE IT FURTHER RESOLVED, the General Manager is hereby authorized to issue a purchase order on behalf of the Authority in the amount of \$32,645 to Miller Pipeline in accordance with the accepted quote.

SAN LORENZO, CALIFORNIA, MAY 21, 2020, ADOPTED BY THE FOLLOWING VOTE:

AYES: NOES: ABSENT: ABSTAIN:

ATTEST: _

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